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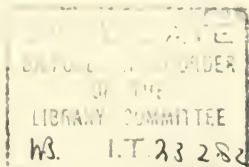
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ADDITIONS AND CORRECTIONS.

Page 102.—A remarkable *lance* of silver found in Spain, and of the precise dimensions of that brought to light at Welney, Norfolk, is figured in the *Annales Archéologiques* for 1861. The subject of its decoration is the Division of the Empire by Theodosius between his two sons.

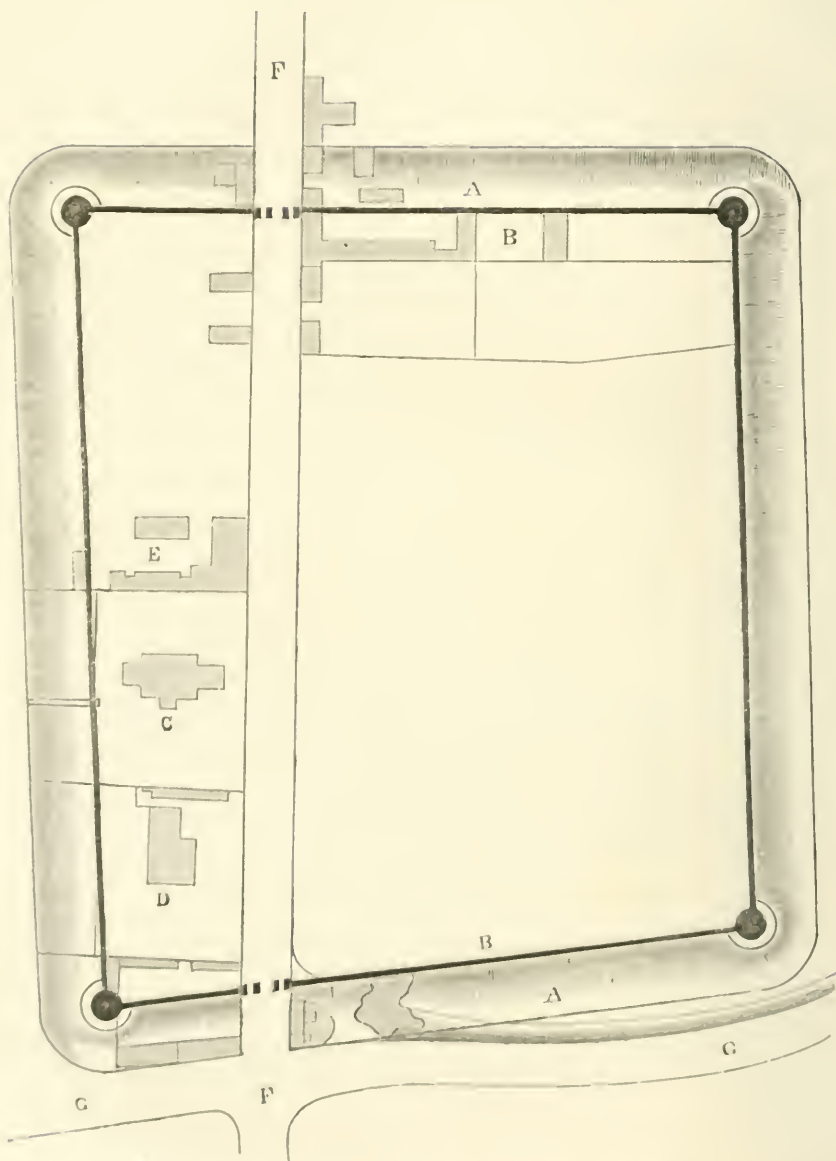
Page 154, line 2, for Ald, read Abel.

Page 182.—A well preserved and good example of the profile portrait of Our Lord is in the possession of Sir Edmund H. Lechmere, Bart., at the Rhydd, Worcestershire. The portrait is on panel, on a gold ground. See also p. 190.

Page 209.—We are indebted to the kindness of the Rev. W. Willimott, Rector of St. Michael Cherbury, for the accurate analysis of the metal of which the Roman *capis* there found is formed. This analysis, made by Mr. Richard Pearce, of the Meria Silver Works, near Swansea, has shown that the metal consists of 98.20 per cent. of tin, with slight traces of iron and copper.

Page 211.—It has inadvertently been stated that stepping holes were noticed in the sides of the shaft at the Grimes Graves, Thetford, to facilitate descent. These remarkable remains have been recently explored by the Rev. Canon Greenwell, and a memoir on his excavations has appeared in the *Journal of the Ethnological Society*, vol. ii. No lateral holes were noticed in the shaft by which the subterraneous cavities had been approached.





Ground plan of Ancaster, Lincolnshire, the Roman Caesennae.

A. Part of the Roman Station, width 60 ft., depth 10 ft. B. The site of the Roman Wall.
 C. Ancaster Church. D. The Parsonage. E. The Hall. F. F., The Lincine Street, leading north-
 wards towards Linc-In. G. G., The Road from Grantham to Stamford.



The Archaeological Journal.

MARCH, 1870.

ANCASTER, THE ROMAN CAUSENNÆ.

By the Ven. EDWARD TROLLOPE, M.A., F.S.A., Archdeacon of Stow.

THE terminal of the name of this place, being the Saxon form of the Latin *castrum*, at once proclaims it to have been a stronghold at a very early period ; from the character of the earthwork partly incorporated in the present village, and other vestiges of its ancient occupants, we are sure that these remains may be attributed to Roman labor, and that they were nearly connected with that great Roman road called the Ermine Street, or, more commonly, the High Dyke. Ancaster is, almost beyond doubt, the *Causennæ* of the Antonine Itinerary, supposed to be placed between *Durobrivæ* (Castor), and *Lindum*, or Lincoln, and stated to be 30 miles distant from *Durobrivæ*, which is nearly correct, and 26 miles from *Lindum*, an error which may easily have arisen through a mistaken interpolation, by one of the transcribers of the Itinerary, of an extra Roman numeral, whereby XVI. has been converted into XXVI., the real distance being 14 miles. Some, however, have thought that this was the Roman station of *Crococolana*, now usually assigned to Brough ; but Horsley and most modern archæologists have confidently come to the conclusion that Ancaster stands on the site of *Causennæ*, originally a military station on the Ermine Street, and around which a small Roman town subsequently sprang up. It stood at a convenient distance from Lincoln, on the north, and also from Casterton, on the south, which served as an intermediate station between it and *Durobrivæ*, the modern Castor.

It may deserve mention that Ancaster has been supposed

by Mr. Hatcher, and some who have accepted the pseudo Itinerary ascribed to Richard of Cirencester, to be the *Causennæ*, *Corisennæ*, or *Isinnæ* of that compilation, (compare Iter III. and Iter XVII.) between Castor and Lincoln, and which had been placed by Stukeley at Stow Green, Stanfield, Lincolnshire. Mr. Dyer, in his elaborate Commentary on the Itineraries, seems disposed to agree in regard to Ancaster, whilst he points out the discrepancy in the distances stated in the fictitious *itineræ*. The spurious character of the alleged treatise has been so fully set forth by Mr. Mayor in his edition of the writings attributed to Richard of Cirencester, and recently issued in the Series of Chronicles, under direction of the Master of the Rolls, that it were needless to examine in detail the supposed occurrence of Ancaster in the deceptive *Diaphrymata*.

Besides its position on the Ermine Street, this station possessed several advantages—such as a sheltered position removed from full exposure to the bleak wilds of the open heath around it, and its proximity to a spring, now called the Lady Well, on the south, and a streamlet of excellent water that never dries up, running along its northern boundary; besides which, access to it was supplied by a remarkable natural fosse or narrow valley, cloven as it were through the adjoining eminence on the south, by means of which troops could leave or enter the station privately. The station consisted of nine acres and eleven perches of land, constituting a slightly irregular parallelogram, the eastern side of which is 520 ft. long, the western side 545, the northern and southern sides 445 ft.; the whole being surrounded by a fosse 50 ft. wide and 10 ft. deep. Parts of this fosse are still perfect, and the whole is easily traceable. Its character may be best seen towards the eastern end of its southern face, where it remains nearly as it was left by the Romans. Within was a wall defended probably at the angles by circular towers, the one at the north-western point still being represented by a well defined circular mound, whence we may presume that the other angles were similarly strengthened, as at Lincoln and Richborough. See the accompanying ground-plan.

No remnants, however, of the walls of this station now exist above ground, and at first we might conclude, from Leland, that he thought it never had been walled; he says,

—"In tymes past it hath bene a celebrate tounce, but not waulld as far as I could perceive."¹ He is here, however, speaking of the subsequent town that grew up round the station, which he terms the Castle, saying, "The area wher the Castelle stood is large, and the dikes of it appere, and in some places the foundation of the waulle;" whilst Stukeley says,²—"I suppose Ancaster to have been a very strong city intrenched and walled about, as may be seen very plainly for the most part by those that are the least versed in these searches." Since then considerable remains of the walls have been found from time to time below the surface, both on the north side in the bowling-ground attached to the Red Lion public-house, and on the west side, where the large stones of a very wide wall, running along the top of the fosse within the churchyard, and doubtless constituting the foundation of the Roman wall, were discovered in 1831.

The area thus enclosed is irregularly intersected by the Ermine Street, about three-fourths of the space sloping upward from it towards the east, now divided into one large and several small grass closes, the above-mentioned Red Lion Inn, and a few cottages standing next to its eastern boundary; the other fourth consists of level ground, on which stand, as shown in the accompanying ground-plan, the vicarage, the churchyard, and a house belonging to the Calcraft family. Of the Roman town which subsequently grew up around the station, considerable remains have been from time to time disclosed. Its houses probably chiefly stood on either side of the Ermine Street, just as those of the modern village do now; beyond these there may have been detached villas of other colonists. The cemetery and its *ustrina*, or burning-place, stood about a hundred yards from the southern wall of the station, and on the eastern side of the Ermine Street. On approaching Ancaster, therefore, during the Roman dynasty, many sepulchral memorials were no doubt seen on either side of it; after the manner of that series of similar monuments which fringed the great *Via Appia* before it passed under one of the gates of Im-

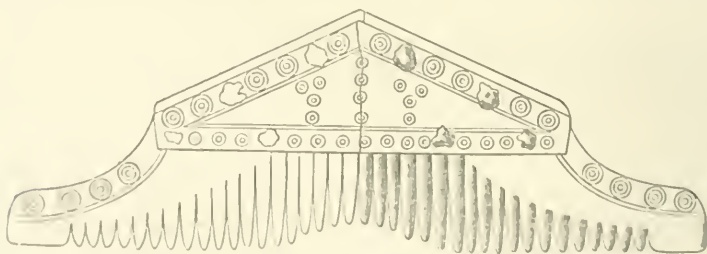
¹ Leland, *Itin.*, vol. i. f. 30.

² Stukeley, *Itin. Cur.* V., p. 86. Horsley, *Brit. Rom.*, p. 432, cites the notices of Ancaster given by Stukeley, and considers it to be the *Causennæ* of the Itinerary. He mentions that "some speak of mosaic pavements discovered there." Salmon,

in his *New Survey of England*, vol. i. p. 247, alludes to the Roman defences of Ancaster, but places *Causennæ* at Brough Hill. Reynolds is of opinion that its position was at Boston. *Iter Brit.*, p. 261.

perial Rome, or that between which the frequenters of the lovely watering-place, Pompeii, approached its pleasures and its mild sea-borne breezes.

Here some skeletons have been found, and many cinerary vases of grey or dull red ware, whose character indicates that the Saxons as well as the Romans made use of this cemetery. About forty of these vases, slightly ornamented with scored patterns, were disclosed a few years ago ; all of them were filled with burnt human bones, and had mostly been deposited in pairs, but without any lid or other covering. Unfortunately they had not been buried deep enough



Bone comb found in a Saxon cinerary urn from the cemetery near Ancaster.

to ensure their preservation, so that most of them fell to pieces on exposure to the air ; but two fragments of triangular-shaped bone combs and a few Roman coins were found here, which had no doubt been deposited in some of these cinerary urns, and subsequently half of such a comb was found by myself in a similar vase of grey ware, containing burnt bones, that was presented to me by Mr. Eaton, the owner of this interesting spot.

In a field a little to the south-west of Ancaster, and called the Twelve-acre-close, a Roman stone coffin was found a few years ago, through the grating of a plough against its lid. It contained the skeleton of a male, but nothing else. It was deposited in a north and south direction. Although rudely formed, it still retains the marks of the oblique Roman tooling upon its surface. Its head is rounded, thus resembling some Roman coffins found at Bath, and it was covered by a slab 4 in. thick. In length it is 6 ft. 10 in. ; in width 2 ft. 2 in. at the head, diminishing to 1 ft. 10 in. ; in height, 1 ft. 3 in. ; depth of the cavity 1 ft. $\frac{1}{2}$ in. ; thickness of the cover 5 in. This coffin is now in the churchyard at Ancaster. See the woodcut on the last page of this memoir.

Leland, in his Itinerary, commenced about 30 Hen. VIII., 1538, gives the following particulars regarding the old town :—“ Ancaster stondith on Wateling as in the High Way to Lincoln ; it is now but a very pore strete having a smaule Chirch. But in tymes past it hath bene a celebrate Tounne, but not waulld as far as I could perceive. The building of it lay in length by South and North. In Southe ende of it be often founde in ploughing great square stones of old buildinges and Romane coynes of brasse and sylver. In the West end of it, were now medowes be, ar founde yn dyching great vaultes. The area wher the Castelle stooode is large, and the Dikes of it appere, and in sum places the foundation of the Waulle. In the highest ground of the area is now an old Chapel dedicate to S. Marie, and there is an heremite.”³ And he relates local traditions of treasure trove near the station :—“ An old man of Ancaster told me that by Ureby, or Roseby,⁴ a plough man toke up a stone, and found another stone under it, wherein was a square hole having Romaine quoin in it. He told me also that a plough man toke up in the felles of Harleston,⁵ a 2 miles from Granteham, a stone under the wich was a potte of brasse, and an helmet of gold, sette with stones in it, the which was presentid to Catarine Princes Dowager. There were bedes of silver in the potte, and writings corruptid.”⁶

William Harrison, in his Description of England, written about 1579, and prefixed by Holinshed to his Chronicles, bears witness also respecting the remains of the Roman town at Ancaster, which then existed, and the coins there found.⁷ “ It seemeth that Ancaster hath beene a great thing, for manie square and colored pavements, vaults, and arches are yet found, and often laid open by such as dig and plow in the fields about the same. And amongst these, one Uresbie, or Rosebie, a plowman,⁸ did ere up, not long since, a stone like a trough, covered with another stone, wherein was great foison of the aforesaid coins.” Stukeley mentions that the Castle Close was full of founda-

³ Leland's Itin., vol. i. f. 30.

⁴ Ewerby is about two miles east of Sleaford ; Rauceby is on the north-east of that town, and about a mile from the Roman Way.

⁵ Harlaxton, south of Grantham.

⁶ Leland's Itin., *ut supra*, f. 31.

⁷ Historical Description of England, Holinshed's Chronicles, edit. 1586, vol. i. p. 217 ; ch. 24. Of Antiquities found.

⁸ Namely, a Rauceby laborer. This tale seems to have been copied, somewhat incorrectly, from Leland.

tions in his day, appearing everywhere above ground, the existence of which is still very plainly indicated during dry seasons by the parched appearance of the grass above them. Here prodigious quantities of Roman coins have been found, both formerly and in modern days. Stukeley observes that, for thirty years before his time, many people in the town had traded in the sale of these, procuring them chiefly from the Castle Close, and from a spot south of it towards Castle Pits; "but they are found, too, in great plenty," he adds, "upon all the hills round the town, so that one may well persuade one's self that glorious people sowed them in the earth like corn, as a certain harvest of their fame, and indubitable evidence of their presence at this place. After a shower of rain the schoolboys and shepherds look for them on the declivities, and never return empty."⁹ These vestiges are still found, not quite so plentifully as of old, but occasionally in large hoards; in the year 1841, a mass weighing twenty-eight pounds was brought to light in digging a hole for a post, in front of Mr. Eaton's house and the above-named cemetery, close to the edge of the Ermine Street. They chiefly consisted of small brass coins of the Emperors Gallienus, Postumus, Victorinus, Claudius Gothicus, Quintillus, the Tetrici, and Aurelianus. Two thousand and fifty of these were sent to the Numismatic Society for inspection, and are noticed in its proceedings.¹ Very great must be the number of unrecorded coins discovered here, but now dispersed, and never to be again recognized as having issued from the soil of Ancaster. I subjoin, however, a list of such as I have been able to ascertain have without doubt been found here. This extends over more than three hundred years,—from the Emperor Claudius, who assumed the purple A.D. 41, to Valens, who died A.D. 378 :—Claudius, Otho, Vespasian, Domitian, Trajan, Antoninus, Faustina, Lucius Verus, Commodus, Severus, Julia Mæsa, Valerianus, Gallienus, Salonina, Postumus, Victorinus, Marius, Tetricus, sen., Tetricus, jun., Claudius Gothicus, Quintillus, Aurelianus, Probus, Maximianus, Constantius Primus, Helena, Theodora, Maxentius, Constantinus Magnus, Constans, Magnentius, and Valens.

⁹ Stukeley, *Itin., Cur., Iter V.*, p. 81.
A view of Ancaster is given from a
drawing by Stukeley, taken July 20,

1721.

¹ Numismatic Chronicle, vol. v. p. 157.

The most interesting object found at Ancaster is one connected with the religious worship of its Roman occupants. Wherever the light of Christianity has been wanting, it is not surprising to find the men in all ages believing in the existence of various gods, who could control events and the fortunes of men. Such was the belief of the Romans ; and many altars, dedicated by them to the Fates, and to Fortune, have been discovered in this country ; while others are inscribed in honor of Nymphs, as having especial influence over groves and springs ; and still more to the Genii or Spirits supposed to preside over particular spots, as well as over particular classes, and persons—such as legions, cohorts, or the reigning emperor. Even these, however, were not sufficient to satisfy the religious feelings of a portion of the Roman legionaries, who, building upon the pleasing foundation of a mother's love and sympathy for the weak or wanting, conjured up the shadowy existence of certain protecting female deities, termed "*Deæ Matres*," whose office it was to watch over the interests of particular provinces of the empire in the first place, but also over particular spots, such as stations, houses, or fields. In vain shall we search for any allusion to these protecting Mothers in the works of classical authors, or for their representation in marble or stone, amongst the antiquities of Southern Italy, although they were certainly introduced into Britain by the Roman legionaries.² In France and Germany, however, under the term of "*Matronæ*," such representations are not rare. We may therefore conclude that the reverence paid to these deities arose from a Teutonic creed, to which the soldiers levied from these countries still fondly clung, after they had been removed by the will of Cæsar from their native lands ; the peculiar *cultus* may have been subsequently adopted by other troops through their instrumentality. These Protecting Mothers are represented, on an altar found at Cologne, as three draped sedent figures, with flowing hair, and having baskets of fruit on their knees. Also, on a bas-relief found at Metz, dedicated by the

² At Avigliano, between Susa and Turin, a remarkable sculpture has been recently found, representing five female figures, with a dedication to the *Matronæ*. No other example of such a deviation from the normal number of three *Deæ Matres* appears to have been noticed.

See a communication from the Padre Garrucci to the Society of Antiquaries, and the note by Mr. Wylie on the worship of the *Matronæ*, Proceedings of the Soc. Ant., second series, vol. iv. pp. 287-293.

"Street of Peace" to their honor, they appear in a standing position, but holding fruit in their hands,³ whilst in this country specimens of either sculptures or altars cut in their honor have been found in London, Lincoln, York, Durham, and at several points along the line of the great Roman Wall in the north, including one group seated on a triple *solium* at Minsteracres.⁴ They were supposed to be benevolent dispensers of plenty; and it is interesting to mark how some worshippers invoked the unknown Mothers of the new localities in which they were stationed, to be their peculiar guardians and benefactors, whilst others still trusted to their own original or "transmarine" Mothers, for protection, or good fortune, on a foreign soil.

In digging a grave at the south-eastern corner of Ancaster churchyard, in the year 1831, a very interesting specimen of the personification of the "*Deæ Matres*" was discovered, together with a small incense altar before it—both apparently occupying their original position. A large stone, about 6 ft. in length by 4 ft. in breadth, formed a base, upon which was a rough intermediate stone, and then the above-named figures, looking towards the south. The deities are seated on a "*sella longa*," united below, but having three separate circular backs above. Their hair reaches to their shoulders, and their dresses are carefully gathered up round their necks as well as their waists. The workmanship, though rude, is effective, and some pains have been bestowed in endeavouring to represent the various folds of the dresses, &c. One figure holds a flat basket or measure on her knee with her right hand; the central one supports with both her hands a similar basket, filled with fruit, on her lap; the third holds a smaller basket containing some doubtful object in her left hand, and a small patera in her right hand. The head of the central figure is wanting, and the others are rather mutilated. The group is 1 ft. 7 in. in length and 1 ft.

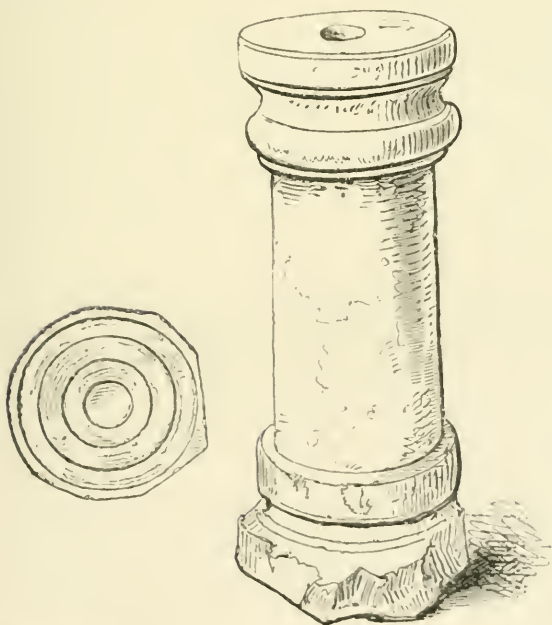
³ *L'Antiquité Expliquée*, Supp. vol. i. p. 85. A singular sarcophagus with a sculpture of the *Deæ Matres*, exists in the Museum at Lyons, and has been figured by Mr. C. R. Smith, in his *Coll. Ant.*, vol. v., p. 8. See also his detailed Remarks on these Mythic personages, *Journ. Brit. Arch. Assoc.*, vol. ii. p. 239; *Roman London*, p. 33. A detailed essay on "*Les Déeses mères*," by M. Granges, is given in the *Bulletin Monumental*, vol.

xxi., 1856.

⁴ The Roman Wall, by the Rev. J. Collingwood Bruce, LL.D., p. 403. See also his observations on this class of deities in the *Lapidarium Septentrionale*, p. 16, where a well preserved example found at Newcastle-upon-Tyne, and now in the collection in the Castle there, is figured. The dedication in that instance is *Deabus Matribus transmarinis*.



Group of the Deæ Matres. (Length 19 in. Height 16 in.)



Small column (height 20 in.) and stone disk placed upon it (diam. 7 in.) Found with the sculpture of the Deæ Matres in 1831.

4 in. in height. Towards the southern end of the base in front of these deities, and upon a wrought stone, 15 in. square and 5 in. in depth, was placed a small pillar 1 ft. 8 in. in height, surmounted by a circular slab 9 in. in diameter, forming a support for a diminutive incense altar, 1 ft. in height and 5 in. in width. In front is a plain panel; on one side are carved some of the sacrificial requisites, viz., a *capis* or jug, and a *patera*; and, on the other, a hand grasping a ring—the emblem of eternity. On the top is a shallow cavity, or *foculus*. The mouldings have been considerably injured by the lapse of time, but their classical character may still be distinctly recognised.⁵



Altar found 1831, with the sculpture of the *Dee Matres*.
(Height 12 in. Width 5 in.)

Ancaster was so attractive in Stukeley's opinion that he, with the aid of Maurice Johnson, the first Secretary, and afterwards President of the Gentlemen's Society at Spalding, succeeded in forming a society of literati, which he proposed should meet there twice a year in the assize weeks. Johnson had suggested Sleaford as the place of assembly, but Stukeley, after a conference with the members of his own locality, wrote the following letter to Johnson, addressed to him at "the Widow's Coffee House," Devereux Court, Strand, and dated February 15th, 1728 :—"I told them of the scheme projected between you and me; they approve of it much, but desire the place may be Ancaster, where we shall not be so much exposed to vulgar observation, and have as good accommodation. 'Tis not above five miles out of yr way, and all heath road, which is but an hour's ride, beside 'tis a Roman castle seated in the very bosom of the most delightful heath imaginable. I admire the place every time I see it.

⁵ These relics were exhibited in the Temporary Museum at the Meeting of the Archaeological Institute at Lincoln, in 1848, by the Rev. Z. S. Warren. Cata-

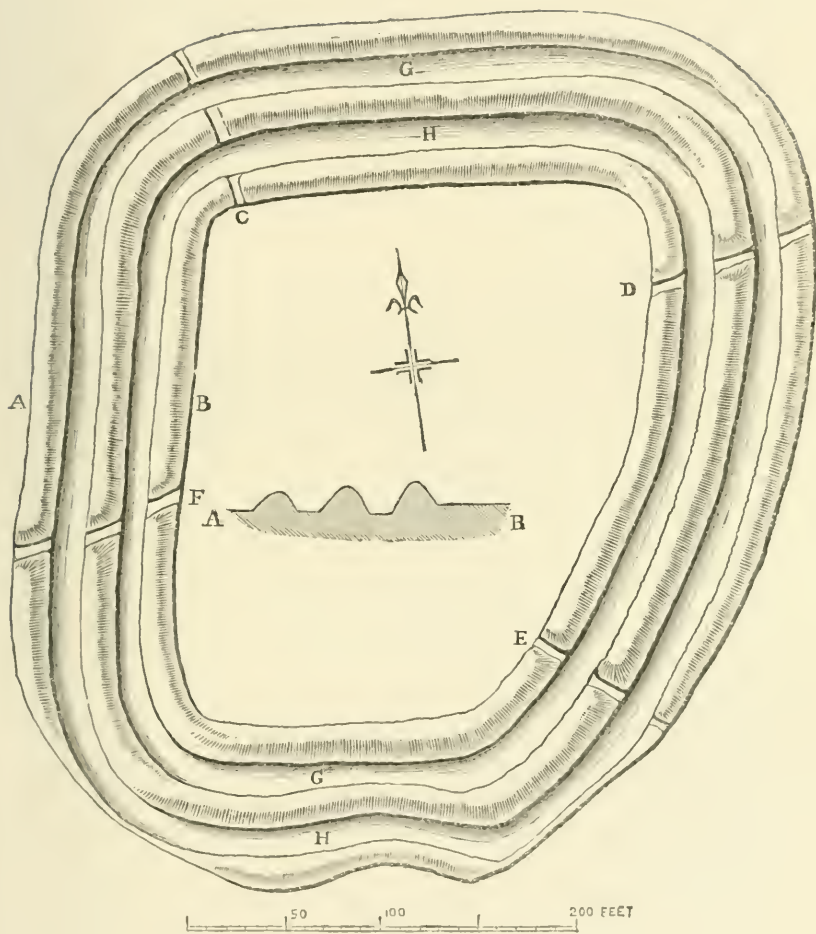
logue of the Museum, Transactions of the Lincoln Meeting, p. xxviii. They have been figured also with a memoir by Mr. Roach Smith, Coll. Ant., vol. v. p. 149.

I shall meet you there on the Thursday of the Assize week, by noon." Accordingly the first of these meetings was held at Ancaster, on the 14th of March, 1728, and from the MS. Minutes of the Spalding Society, vol. ii. p. 4, we learn that a paper by Stukeley was then read, "which was highly approved by the society, being very ingenious, pertinent to the occasion, and much to the honor of this society and that design." In it he endeavoured to prove that Laundenthorpe and not Trekingham (as the vulgar tradition will have it) was the scene of the famous battle between Algar, Earl of Holland, with his fen forces, and the Danes, which took place September 22nd, 870. Stukeley thus congratulated the society upon their assembling at so interesting a spot,—“If we consider the place of our meeting, we are within the walls of an old Roman city, upon the most considerable of their roads in the Island of Briton, viz., the Hermen Street. Many are the Roman Emperors and innumerable the legions that have marched past the door in their journies northward to guard the Scottish frontiers, and we may truly be said to be on classic ground.”

On a commanding eminence in the adjoining parish of Honington is a strongly entrenched earthwork, pronounced by Stukeley to be a "*castrum exploratorum*" of the Romans, but this must certainly be of British origin, as it in no respect resembles a Roman camp.⁶ It consists of an area containing about an acre and a quarter of ground, of irregularly quadrangular form, surrounded by a triple vallum and a double fosse, occupying two more acres. The area, as shown in the section with the accompanying plan, is about 3 ft. 6 in. above the level of the surrounding field. The average height of the outer vallum is 3 ft., that of the other two 7 ft., but the level of the enclosed space is 3½ ft. above that of the bottom of each fosse. The width of the inner vallum is 19 ft. 4 in., of the middle one 27 ft. 4 in., of the outer one 15 ft. 4 in. As the slope of each vallum can be easily surmounted, perhaps there were no regular entrances to the central area, but there are slight depressions at four different points through the valla, which may or may not be of

⁶ A ground plan is given, in Camden's *Britannia*, edit. Gough, vol. ii. pl. lvi. See also Stukeley, *Itin. Cur.*, Iter V. p. 81. In a letter from Stukeley to Roger Gale, Jan., 1727-8, he states that com-

were found very frequently at Honington, and that he had recently received several. *Ibid.* Top. Brit., vol. iii., Reliqu. Galeane, p. 51.



Plan of the Entrenchment on Honington Heath, Lincolnshire.

(From a Survey by Mr. Thomas Ogdén, taken in 1854.)

A B. Section of the Works on the west side. C. D. E. F. Four Entrances, shown by depressions in the triple vallum. G. The Outer fosse, width about 12 ft. H. Inner fosse, average width 12 ft. The area within the inner vallum is about $1\frac{1}{4}$ acre.

subsequent formation. The whole remains in a very perfect state, a portion only of the outer vallum having been partially cut away at two points.

This earthwork was undoubtedly occupied by the Romans, for in 1691 an urn containing a peck of Roman coins was discovered within its area, and subsequently two other urns were found full of coins, a score of which were presented to Stukeley in 1728. Amongst these he names a large brass of Agrippa, another of Julia the daughter of Augustus, and one of Magnentius. Fragments also of spears, bridles, and swords, had been ploughed up not long before his visit to the place in 1724.⁷

In June, 1865, a Roman kiln was brought to light at Ancaster, close to the eastern side of the Ermine Street, and a little to the north of the village and ancient *castrum* of *Causennæ*. The discovery occurred in excavating the ground for the purpose of erecting a mill, and it was promptly made known to me by Mr. Bruce Tomlinson.

In form the kiln was oval, 5 ft. long and 4 ft. 6 in. wide at the bottom, gradually increasing to 6 ft. by 5 ft. 6 in. at the top. The floor was composed of rude stone slabs, the sides were built of neatly cut stones 3 in. in thickness, each course being slightly set back as the work was carried up, so as to produce the desired increase of the size of the kiln above. The lower courses were in good preservation, the stones resembled bricks, from their uniform bright red color and general appearance, but on examination the material proved to be marl-stone profusely abounding with fossil shells, chiefly consisting of the *Rhynchonella tetraedra*, and a species of *Terebratula*. Such marl-stone containing a profusion of the same liassic *Brachiopoda* is found in the adjacent parish of Barkstone, so that the Romans had not far to go for a supply of material suited for their purpose; from their wonderful practical intelligence they appear to have used this compact crystalline rock for the construction of a kiln or oven as being well adapted for exposure to a continued high temperature. Portions of the same rock, in a half calcined state, have been found from time to time by the borders of the Roman road on the outskirts of Stamford, and the use of such a material seems to have been continued, as pieces of

⁷ Camden, *Britannia*, edit. Gough, vol. ii. p. 359.

the same marl-stone or "red rock," as it is locally called, from the color it has acquired through exposure to heat, are often found among the foundations and débris of the older buildings of Stamford.

The entrance to the kiln at Ancaster had been previously disturbed; but its site was filled in with stones of the oolitic



Roman pottery found near Ancaster. Height of the central urn 10 in., the other two 7½ in.

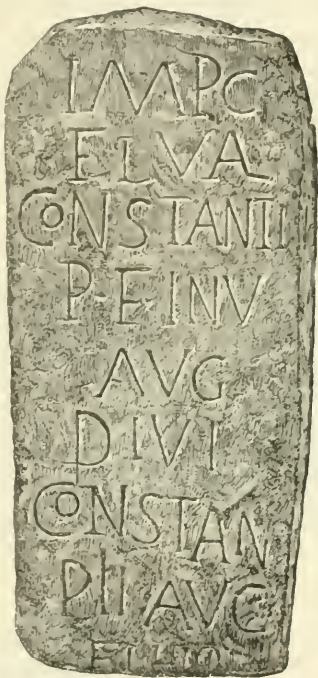
kind found almost upon the spot, and for which Ancaster is so noted. Some pieces were blackened and others partly reddened, through exposure to fire. Close to the kiln were found numerous specimens of Roman pottery of the usual pale red, grey, and cream-colored wares. Among these were portions of gracefully shaped vases and pitchers, one of which has the three-lobed mouth and small handle often seen in the choicest examples of the Roman *capis*. A few small coins were found intermingled with these relics, including one of Arcadius, several of Constantine the Younger, and others, but none of any particular interest. A group of six or seven skeletons was also discovered deposited in a regular manner, but unaccompanied by any vases or other ancient relics.^a

Passing northwards out of Ancaster, the Ermine Street is very conspicuous, both from its width and embankment, particularly at those spots where it surmounts the successive undulations of the heath before alluded to—now, however,

^a Twenty-second Report of the Architectural Society of the Diocese of Lincoln; Associated Architectural Societies' Reports, 1865, vol. viii. part i. p. 11.

universally invaded by the plough, and dwarf stone walls inclosing a succession of vast fields.

“Upon our road,” as Stukeley observes,⁹ “there are many stones placed; but most seem modern, and like stumps of crosses—yet probably are mile-stones. It would be of little use to measure the intervals,—for one would find that the whole distance between two towns was equally divided by such a number of paces as came nearest the total.” And again,¹ “I have seen bases of milliaries, and one or two fragments of milliaries, on its sides.” These have now disappeared; but, a few years ago, the upper portion of a milliary was discovered at about a quarter of a mile north of Ancaster,² and close to the western edge of the Ermine Street, with this inscription:—“IMP. C. FL. VAL. CONSTANTINO. P. F. INV. AVG. DIVI CONSTANTII. PII AUG. FILIO,” which may be read thus:—“Imperatorii Cæsari Flavio Valerio Constantino Pio Felici Invicto Augusto Divi Constantii Pii Augusti Filio.”³ It is merely a rough slab, 2 ft. 3 in. in length, 1 ft. in width, and 7 in. thick. The base appears to have been broken off, otherwise the now uncertain appellation of the adjoining station might very possibly have been ascertained from this stone beyond all doubt; for thus the milliarium discovered near Leicester, and



Milliary stone found on the Ermine Street, near Ancaster.
Length 27 in., width 12 in.

⁹ Stukeley, *Iter V.*, p. 87.

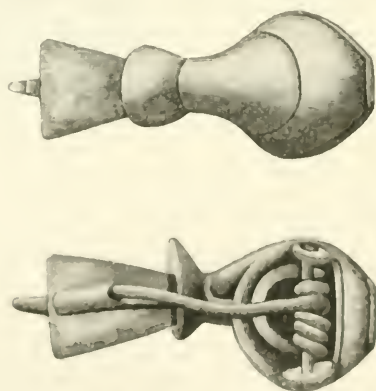
¹ *Iter I.*, p. 80.

² This milliary was found near the spot where the Roman kiln and other relics have recently been brought to light, but on the other side of the ancient *Via*.

³ Compare dedicatory inscriptions to Constantine given by Horsley, *Northumberland*, No. lxxi. p. 231; and West-

morland, No. ii. p. 297. A milliary stone bearing an inscription much resembling that above given was found in 1812, near Cambridge, on the road to Huntingdon, *Gent. Mag.*, vol. lxxxiii. 2, p. 524. See also another like inscription found in the walls of the church of St. Hilary, Cornwall; *Arch. Journal*, vol. xii. p. 283; *Trans. Penzance Nat. Hist. Soc.*, vol. ii. p. 290.

now preserved in the museum of that town, not only denotes that it was set up in the reign of Hadrian, but that it marked the second mile from *Rata*, or Leicester. A miliarium found at Castor also bears a similar dedication to the same emperor, which I here allude to for the purpose of dispelling any idea that might be formed of fixing the date of the formation of the *Via* itself from such slender evidence on its borders, although so intimately connected with it; as we might hence be led to suppose that the line Castor was formed between the years 117 and 138, and that about Ancaster between 306 and 337. Doubtless these mile-stones were renewed from time to time by the official *Curatores Viarum*, either when the older ones had been injured by the lapse of time or by accident, and also when it was wished to pay a compliment either to a reigning or a passing emperor, in whose honor the new ones would of course be inscribed, although such would have no connection with the formation of the line. After the young Constantine had made an extraordinarily fast journey from the Palace of Nicomedia, in the East, by the aid of the established *Mutationes agminales* (where relays of horses could be procured along all the military ways of the empire), for the purpose of joining his father, the Emperor Constantius, in Britain, and had found him at Boulogne on the point of embarking for this island, he accompanied him upon his expedition against the

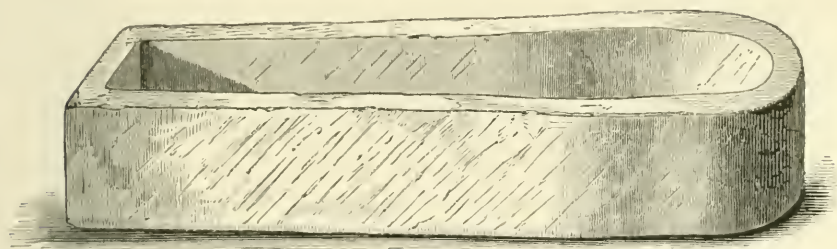


Bronze fibula, found at Ancaster. Original size.

Caledonians. There can be little doubt that on this occasion both the reigning and the future mighty emperors passed the very spot where this stone was shortly afterwards

set up, probably by some who had actually seen them and their legions marching northwards in all the pomp of war and had also witnessed the return of Constantine, who, in the interim, had lost his excellent father by death, at the imperial palace of York. This milliary stone was probably not found in its original position ; but having perhaps been broken, seems afterwards to have been used to mark the depository of some human ashes, such relics, together with fragments of pottery, and a red deer's horn, carefully sawn off, having been found with it.

Among other small Roman articles found here, in 1861, was a beautiful little bronze fibula, shaped like a horse's foot, and illustrating, as it is believed, the manner in which the Romans shod their horses (see woodcut).



Roman coffin of stone found near Ancaster. Length 6 ft. 10 in.; height 1 ft. 3 in; width 2 ft. 2 in. at the head, 1 ft. 10 in. at the foot. See page 4, *ante*.

THE PORTRAITURE OF THE ANCIENTS.

By C. W. KING, M.A.

ONE of the most tantalising peculiarities belonging to the study of Antique Gems is the existence of that innumerable series, thrown together at the end of every catalogue under the designation of "Unknown Portraits." What can be more trying to one versed in ancient history than to possess some impress of a face full of life and individuality, to be morally conscious that he has therein the "counterfeit presentment" of some great philosopher, statesman, or warrior, and after all, to be obliged to content himself, at best, with the arbitrary ascriptions of Fulvius Ursinus, Leon Agostini, Gori, and Visconti—ascriptions based for the most part upon the fancied agreement of the features with those of some restored, almost equally unreliable, bust or statue? Where the assistance of medals fails us we indeed have no other resource than this; and even this poor resource labours under another disadvantage; sculpture, when reproduced by drawing, losing so much of its character, that the marbles or bronzes are of little real service to our purpose unless we be enabled to examine the originals for ourselves, and compare them with the miniature heads we are endeavouring to identify. Visconti, in his two *Iconographies*, has availed himself only to a very limited extent of engraved gems in order to complete his series of Greek and Roman portraits, being probably deterred by the consideration that a mere *supposed* resemblance, when unsupported by an inscription, was insufficient warranty for their admission amongst likenesses in the authenticity of which his own archaeological credit was involved. It is, however, possible that had the acute Italian more attentively studied these minuter, but far more perfect, memorials of ancient celebrities, he might have conscientiously augmented his muster-roll, and that to a very considerable extent.

It was for posterity an unfortunate impulse of the pride of

art, that made the Roman engravers think it beneath them to continue the practice of their Etruscan predecessors (who carefully subjoined his name to every hero they portrayed), but rather to trust to fidelity of portraiture for the sufficient declaration of their subjects. As far as regards the personages of mythology, they did not often err in this estimate of their own powers, for in that province all the types had been fixed for them by immemorial tradition. Plutarch (*Aratus*) mentions some curious facts, proving incidentally how familiar the aspect of their most ancient celebrities had been rendered to the Greeks by their repeated representations in every form of art. Thus, Nicocles, tyrant of Sicily, was the exact image of Periander, one of the Seven Wise Men; Orontus the Persian, of Alcmaeon; and a certain young Lacedæmonian, of Hector. To the last-named this discovered resemblance proved fatal, he being crushed to death by the multitudes who flocked to see him as soon as it was made known.

But in the case of ordinary mortals, no amount of skill in the artist could preserve to his work the possibility of recognition after all remembrance of the deceased original had passed away together with his contemporaries. And, by an unlucky coincidence, it was precisely at the date when portraits from the life first began to appear upon gems, that the old explanatory legends were discontinued—a circumstance that has robbed of its chief value what otherwise would have been by far the most interesting department of every gem-cabinet. The engraver remained satisfied with having by his skill ensured the recognition of his patron amongst contemporaries,—nevertheless it is inconceivable how he should have neglected so easy and obvious a method for immortalising him amongst the educated for all succeeding time. Such a precaution he has actually taken for the continuance of his own posthumous fame in the case of his principal works by adding his *signature*; but this very care has, in some instances, only served to mislead posterity (as in Solon's case), by making us attribute to some celebrated namesake of the artist's in Grecian history, the actual personage of his Roman employer.

In other cases when a name *does* accompany a likeness, it often proves no more than a client's or freedman's, paying thus his homage to the grandee really represented

there—a species of adulatory deification borrowed from the very ancient custom of joining one's own name to the figure of the patron-god upon the signet. But most frequently of all, alas! when the inscription does professedly designate the subject (if a noted historical character), it is easily detected as a mere clumsy interpolation by a modern hand, made in order to give value to an unknown head, in the same way as busts of private Romans were commonly, during the same period, inscribed by their finders with the titles of the most eminent sons of Greece.

How important, how intensely interesting, the class of gem-portraits would now be to us, had the slightest means of identification been generally supplied by their authors, is a thought that must strike every one who considers the immense number still extant, the conscientious diligence displayed in their execution by the highest ability in that branch of art; and last but not least, the ample means at the artist's command for ensuring fidelity in his reproduction even of long departed worthies, when representing them at the order of their descendants or admirers. Throughout Asia Minor, Greece, and Italy, every town had its temples, gymnasium, agora, or forum, peopled with the statues, in all materials, of those amongst her sons who had in any way distinguished themselves in arms, letters, or the public games; and as civilization advanced, popular adulation or private vanity swelled their hosts to an extent perfectly inconceivable to our notions, often by the mere multiplication of the same figure.

Plutarch notices, as a remarkable exception to the general rule, in the case of Agesilaus, the absence of all portraits or statues of so eminent a man; for he would not allow any to be taken in his lifetime, nay more, upon his death-bed actually forbade it to his survivors. The antiquity of the practice appears from the same historian's notice of the statue of Themistocles he had admired, standing in the temple of *Athene Aristobule*, both statue and temple erected by the great statesman, describing it as “of an aspect as heroic as his actions.” Alexander on entering Phaselis, in his Persian campaign, was delighted to find the statue of his favorite poet, the lately deceased tragedian, Theodectes, newly set up by his fellow-townsmen, and testified his gratitude by crowning it with garlands. On entering Persepolis as victor,

he sees a colossus of Xerxes thrown down by the rush of fugitives, and debates upon the propriety of re-erecting the same, but finally decides to leave the figure prostrate as a punishment for the impiety of its original when in Greece. Such memorials, still preserved in Plutarch's times, went back to the remotest antiquity ; he speaks of a statue of Orpheus in cypress wood then existing at Lebethæa, in Thrace. Lysander with his confederate generals, his own offering in gratitude for the termination of the Peloponnesian War, were still standing in marble in the Treasury of the Corinthians at Delphi.

These dedicated groups often represented some noteworthy event in the hero's life. Craterus sends to the same temple a work by Lysippus of Alexander attacking a lion with his hounds, and himself hastening to his aid. Philopœmen, "last of the Greeks," dedicates there his own equestrian figure in the act of spearing the Spartan tyrant, Machanidas. Aratus destroys the portraits of the line of Sicyonian tyrants. Amongst them was that of Aristostratus, standing in a chariot and crowned by Victory, the joint work of all the scholars of Melanthius, including the great Apelles. Nealees, himself an admired painter, is employed to efface the tyrant's figure, which he replaces by a palm tree. The first proceeding of the Macedonian king, Antigonos Doson, when master of Sicyon, is to set up again the statues of these tyrants, whence it must be concluded that Aratus had not actually destroyed, but only removed them from their posts of honour in the public place. Public gratitude gave additional stimulus to artistic energy—down to Plutarch's age those very early masters Silanion and Parrhasius, were honoured with annual sacrifices by the Athenians for their successful statues and pictures of the national hero, Theseus. A laughable example of cheap honour to a public benefactor, is afforded by the lately discovered Sestine Inscription, which after enrolling the vote of a bronze statue to a great civic patriot, one Menas, goes on to declare that the resolution being delayed through want of funds, Menas had added yet this to his other enumerated services, that he had set up the statue at his own expense.

To illustrate the unlimited multiplication of such honours, a few examples, taken at random, will more than suffice. Demetrius Phalereus, governor of Athens for Demetrius

Poliorectes, was complimented by that time-serving community with a bronze statue for every day in the year. At Rome, and in yet uncorrupt republican times, Marius Gracidianus, on account of his verification of the silver currency, obtained, from the gratitude of his fellow-citizens, a similar honour placed in *every* street of the city. Pausanias beheld the consecrated ground, no less than half a mile in circuit, crowded with those of Hadrian alone, all congregated round his grand work, the Olympæum at Athens. Their number may be estimated from the fact, that every town pretending to be an Athenian colony had sent thither one in its own name; the parent state, as was right and proper, outdoing them all by a *colossus* of her imperial second founder placed in the rear of the shrine. Doubtless that benefactor had, underhand, supplied the funds for so costly a memorial; for the just quoted example of Menas informs us that a man's subscribing money to his own glorification is far from being the invention of our own day. For, the making a colossus, even in those ages of superabundant artistic power, swallowed up the revenue of a Grecian state. The Apollo of the Pontic town bearing his name, thirty cubits in height, had cost no less than five hundred talents (100,000*l.*): the more celebrated one at Rhodes, seventy cubits high, required the outlay of three hundred (60,000*l.*):¹ the Mercury of Auvergne made by Zenodorus, the dimensions of which Pliny does not give, stating only that they exceeded those of Nero's by the same statuary (110 feet),—"omnem amplitudinem ejus generis vicit,"—cost the equivalent of 400,000*l.* [CCCC], and required ten years for its completion.²

The rage for colossus-making flourished down to the last days of art. Gallienus had commenced one to his own honour on a scale preposterously exceeding even the extravagance of Nero's ambition, for the shaft of the spear held in the emperor's hand contained a winding stair by which a man might mount to the top. Another remarkable example are the marble colossi of the imperial brothers, Tacitus and Florian, placed over their *cenotaph* at Terni in the centre of their paternal estate, and which, when Vopiscus

¹ This great disproportion in cost, as compared with the former, is explained by its *material* being furnished from the siege train of Demetrius Poliorectes,

abandoned by him in his flight from the island.

² xxxiv. 18.

wrote, were lying on the ground shattered and cast down by a recent earthquake. And lastly, the insane ambition of the miserly Anastasius thus to indulge his vanity, but at as cheap a rate as possible, led to the destruction of a whole street full of monuments of better times, all cast into the furnace to supply the requisite metal.

But to return to the regular class of these memorials, as showing the long perpetuation of the practice. Ammian notices, such as raised by Constantius II. in the grand square at Amida to commemorate certain officers who had fallen victims to the perfidy of the Persian, Sapor; and again, Julian's conferring the same distinction upon Victor, the historian.³ From the terms in which Nicetas speaks of the statues of victorious charioteers adorning the Hippodrome at Constantinople down to the year A.D. 1204 (when they were all melted down by the Franks on the capture of the city), it would appear that these popular heroes continued to be thus perpetuated in bronze so long as the circus-races themselves were maintained.

Plutarch has preserved a good saying of old Cato the Censor's, *apropos* of the multiplication of such memorials by everyone that chose to pay for the gratification of his vanity. Many people of small note having statues set up to them in Rome and himself none at all, notwithstanding his notable services to the State; on this being observed to him he replied, that "he very much preferred it should be asked why he had *not* a statue than why he had one." This neglect, however, was subsequently rectified, for Plutarch had seen a bronze statue of him in the character of Censor standing in the temple of Salus. Again, some faint idea of their incredible numerousness is given by the casual notices of the swarms so long remaining in Greece. Many generations after that country had become the favorite foraging-ground of every Roman amateur who possessed authority to plunder—like Nero, who made a *selection* of five hundred bronze statues "of gods and men indiscriminately" out of those at Delphi alone.⁴ Nevertheless, the learned Mucianus calculated that at the time of his tour in Greece a few years later, there were still remaining three thousand statues in Rhodes singly, and an equal number at Athens, Olympia, and Delphi respectively. But what the pillage had been

³ xxi. 10. 5.

⁴ Pausan., x. 7. 1.

under the earlier Roman domination may be imagined from a single fact. Scaurus, Sylla's stepson, had that very same number employed in the decoration of his temporary wooden theatre. But, in truth, the fecundity of Greek genius had been absolutely miraculous, Lysippus alone having executed fifteen hundred statues, some of them colossal, and everyone of them perfect in its kind. The Greeks, however, had the less right to complain of this Roman spoliation, having themselves set the example of the licence in this lust given by victory; Cleomenes, on capturing Megalopolis, sending off all the statues and pictures he found therein to decorate his own capital, Sparta. The new conquerors commenced operations in the line of art-plunder at the taking of Syracuse, when Marcellus despatched one half of the statues found there (the other half to the Samothracian Cabiri) for the decoration of Rome, an innovation strongly censured by his countrymen of the old school. Thirty-seven years later, Mummius similarly despoiled all the cities belonging to the vanquished Achæan League, leaving only, out of respect for his memory, the numerous statues erected to Philopœmen in each member of that confederacy.

Rome again, and probably the other chief *Latin* cities (for the Etruscan we have positive statements), although destitute of the productions of Greek art previous to these conquests, nevertheless possessed an abundant stock of her own in the primitive national style, corresponding with the very Archaic of the Greeks. These monuments, of infinite historic, though perhaps small artistic value, ascended, as Pliny incidentally informs us, to the Regal Period, and even beyond; for a Hercules was, in the historian's day, venerated by religious antiquaries as the work of Evander himself. The author of the curious treatise, "*De Rebus Bellicis*," although writing under the Lower Empire, had undoubtedly very respectable ancient authority for his assertion,—"*Aris copiam in simulachris propriis ad virtutis sue testimonia figurabant;*" speaking of the early times of Rome when coin of any kind was unknown. Such a tradition has met full and remarkable confirmation in the conclusion at which the best numismatists are at last arrived, that the *aes grave*, instead of remounting to Numa's reign, can none of it claim higher antiquity than the rebuilding of Rome after the Gallic sack, B.C. 390; for their style does not display aught of

the Archaic, but merely the coarseness of bad copies from fine Grecian models. We discover the reason for Pliny's remarking that "*Signa Tuscanica*, which nobody disputes were made in Etruria, are dispersed all over the world," as well as of the present plentifulness of "Etruscan bronzes" (their modern synonym), from the single recorded fact, that at the capture of Volsinii (B.C. 261), Fulvius Flaccus carried away to Rome no fewer than two thousand statues!—a number absolutely incredible, did not the hosts of their representatives that yet exist inform us of their real nature. They must have been mostly *statuettes*, and diminutive ones too; although the "Aretine Orator," a Metellus, a masterly portrait-figure, is of life-size.

But, what is more to our present purpose, Rome, and doubtless other Italian cities, possessed an inexhaustible treasury of portraiture in another and less costly material, yet one infinitely superior to all the rest in the essential point, exactitude. For as Polybius minutely describes⁵ the custom: upon the death of every person of family, his face was modelled in wax with the utmost care, and even *coloured* after the original: which waxen casts were afterwards preserved in little cabinets arranged in genealogical order around the *atrium* of the ancestral residence. To take a cast from a person's face in plaster, and to use this as a matrix for the melted wax, was the invention, says Pliny, of Lysistratus, the brother of Lysippus. The same artist was the first to make *actual likenesses* of his patrons, all Greek sculptors before him having invariably idealized their features,—"*quam pulcherrimos facere studebant.*"⁶ If, therefore, the credit of this invention were really due to Lysistratus, the primitive Roman *imagines* must have merely been modelled by hand, not direct casts from the face of the defunct. The profession of modeller consequently must have been a flourishing one at Rome, one proof of this amongst the rest being the frequent occurrence of gems, the signets of such artists, exhibiting them at work upon these heads supported on the left hand, conclusive evidence of the nature of the substance they are manipulating. These waxen masks were those *imagines* whose long array formed the pride of the degenerate nobles who despised Marius and Cicero for their want of them, and who, as the great orator

⁵ vi. 53.⁶ xxxvi. 44.

sharply says of Piso, "crept into honours through the recommendation of smoke-dried ancestors whom they resembled in nothing save in their *complexion*."

Nothing resists the action of time so effectually as modelling wax, if only protected from pressure, a proof of which is afforded by regal seals (of the same composition) preserved from early Norman, and even Carlovingian reigns. Hence these *imagines* preserved unchanged the personal appearance of the Roman's ancestors for many generations back. For this reason we may accept with all confidence the portraits of Brutus the Elder, Ahala, Metellus, Scipio Africanus, &c., upon the consular denarii, or upon gems, although such may only date from the last two centuries of the Republic. At the obsequies of any person of a patrician family, these *heads* were affixed to figures clad in the official costume appropriated to the former condition in life of each person; and these effigies, so completed, followed in long procession the last departed member of their line as far as the *Rostra* in the Forum, where the next of kin delivered a funeral oration in his honour, recapitulating with the merits and exploits of the individual all the traditionary glories of his *gens*. A good idea of the remote antiquity to which these memorials were carried back may be derived from Tacitus's allusion to the interminable line of *imagines* which graced the funeral of Drusus, only son of the Emperor Tiberius. Beginning with Æneas they went through the series of the Alban kings, then Attus Clausus and the Sabine nobility, finishing with the unbroken succession of the Claudian race.

In addition to these private stores of portraits, from their very nature the most authentic that could be desired, Pliny often refers to another class, to which a passing allusion has been made above. These were the host of statues, or rather *statuettes*; a half-life size, *tripedanea*, being (as he remarks in the case of those erected to the murdered envoys Julius and Cornucanius, B.C. 231) considered in early times as something out of the common for such monuments. Beginning with the Kings of Rome they illustrated each successive period of her history until they culminated in the grander works springing out of the vanity and ambition of the last ages of the Republic, and the commencement of the Empire.

The extreme antiquity of the custom is manifest from Pliny's mention of the statues of the Kings, which he quotes

as authorities on a point of costume, a proof of the care bestowed upon their execution. The very nature of the case proves these statues to have been works of the period they commemorated; it being absurd to suppose that the early or late Republic should have erected statues in honour of a detested government, the very name whereof was synonymous with *tyranny*; although even this hatred had been forced to spare these original monuments, as being sacred things, the property of Jupiter of the Capitol. Of their style of execution a good notion may be formed from the heads of Romulus, Sabinus, Numa, and Ancus on the denarii, struck late in the Republic by families claiming descent from this ancient stock—portraits testifying to an experienced eye, by their peculiar style, that they were true copies of Archaic originals. Stiff in the extreme, they were none the less true to nature, as the sole surviving relic of their school, the Wolf of the Capitol, strikingly declares. Another, and a curious proof of the correct individuality secured to his portraits by the Regal brass-founder, lies in the circumstance Plutarch records respecting the statue of Brutus the Elder, holding a naked sword, and “then standing amongst the Kings in the Capitol.” In the features Posidonius, the philosopher, declared he could trace a strong family likeness to his celebrated namesake and imitator. But of the statue of the contemporary Porsenna, then existing in the Senate-house, he remarks that the style was rude and Archaic: a good testimony to its genuineness.

To cite a few illustrations of the fecundity of the national Italian school in ages long preceding the date when

“Grecia capta ferum victorem cepit et artes
Intulit agresti Latio:”

Pliny mentions that the statue which Spurius Cassius (who was put to death for treason B.C. 485) had *erected to himself*, long suffered to stand behind the temple of Tellus, was finally melted down by order of the censors, Scipio and Popilius, at the same time that they *removed* (not *destroyed*) out of the Forum all statues of persons that had borne office which had not been authorised by public decree to enjoy that honour. This cruel onslaught upon a harmless gratification of vanity took place in the year B.C. 159. Again, to quote Pliny’s own words, “I would have supposed the *three* figures of the

Sibyl, with that of Attus Nævius made by Servius Tullius's order, to be the most ancient works in Rome, were it not for the statues of the Kings which stand in the Capitol." As early as the date B.C. 495 Appius Claudius, when Consul, set up all his ancestry, with their titles underneath, in the temple of Bellona. By a proud generosity Rome preserved the memorials of even her bitterest enemies—a gold *clypeus* embossed with the bust of Hasdrubal (captured by Marius in Spain) was fixed over the portal of the Capitol. Of Hannibal himself no fewer than three statues were objects of interest (*visuntur*) to the historian's contemporaries; whilst the colossal Baal of Carthage, propitiated of old with human victims, stood by neglected in the open air. And further, these honours were paid to the memory of the illustrious dead even under circumstances that one would fancy would have precluded them; but it appears the victorious side had sufficient magnanimity to concede this innocuous consolation to the vanquished. For example, Plutarch had admired the statue of the younger Cato standing, sword in hand (like his predecessor of old) upon the Utican shore, marking the site of his funeral pile; probably erected by the townsmen, who are mentioned as having celebrated the patriot's obsequies with the greatest respect, regardless of all consequences to themselves from the displeasure of the conqueror.

The source, therefore, being so astonishingly copious, it was only natural the Roman gem-engravers should avail themselves thereof, and that they did so to the full is manifested by the present abundance of antique portrait gems. That so small a proportion of their number has been identified, is partly due to the negligence of gem-collectors in not studying ancient sculpture with that view, or, better than all, the portraits on the consular coinage. The latter means, judiciously applied, often leads to the recognition of the great personages of the Republic, immortalised by history, and now recalled to life for us by the manifestation of their countenances upon the signets of their next descendants.

But the same study opens out a far more extensive field than the range of Roman history. Of the Grecian *philosophers* the gem-portraits, though seldom contemporary (for reasons I have sufficiently discussed in another place) must by no means be regarded on that account as mere creations

of the artist's fancy, drawn in accordance with the popular conception of the character of each. A host of statuaries are catalogued by Pliny, beginning with Colotes, the partner of Phidias, such as Androbulus, Apollodorus, Alevas, Cephisodorus, &c.; all distinguished for making the portraiture of philosophers their special walk in their profession; or else like Chalcosthenes, devoting themselves exclusively to the sculpturing of athletes and charioteers. As all these (besides many more named by Pliny) principally occupied themselves in thus perpetuating the outward forms of the numerous *literati* of their respective generations, the series of authentic likenesses in this class ascended considerably beyond the period of Plato, although probably somewhat idealised before the invention of Lysistratus already noticed. During the disasters of the Samnite War (B.C. 343) the statues of Pythagoras and Alcibiades were set up in Rome by the Senate when ordered by the Delphic Oracle to pay this honour "to the wisest and to the bravest of the Greeks." Pliny is surprised at these particular two being preferred to Socrates and Themistocles, but as far as regards the Samian sage the Romans found good reason in the tradition that made him to have been enrolled a citizen of the infant state, nay, the actual preceptor of Numa: his son Mamercus was claimed by the Æmili as the founder of their family. Of the first of these two bronzes the appearance is preserved to us by a *contorniato* medal; the philosopher was seated in his chair in the attitude of meditation, his head resting on his hand.

These likenesses were prodigiously multiplied so long as the study of philosophy continued in fashion at Rome, that is, during the first three centuries of the empire. Pliny⁷ notices the "modern invention" of placing in libraries the figures of learned men, made of gold, silver, or at poorest of bronze ("aut certe ex ære"), which he attributes either to Asinius Pollio, who first established a public library at Rome, or else to the royal founders of those at Pergamus and Alexandria. Juvenal laughs at the swarms of impudent pretenders to the title of philosopher who usurped that dignified name on the strength of having their rooms crowded with plaster busts of Chrysippus, and who regarded themselves as quite perfected by the purchase of a good

⁷ xxxv. 2.

Aristotle or Pittacus, or a contemporary head of Cleanthes, to decorate their bookcase.

That the followers of the different schools displayed in their signets the heads of their respective founders, would readily be supposed from the nature of circumstances; and this supposition is converted into certainty by Cicero's laughing at the Epicureans amongst his friends for carrying about with them their master's portrait in their table plate, and in their rings.⁸ And a century later, Pliny mentions the fondness of the same sect for setting up his portrait in their rooms, and carrying it about with them whithersoever they went.⁹ Such a practice accounts for the frequency of the heads of Socrates on gems of the Roman period; for none perhaps are to be met with whose style approaches more closely to the epoch of the Athenian sage. *Plato* likewise makes his appearance on the same medium as his master, but to far less extent than collectors flatter themselves in their hope of so interesting a possession, for his grave and regular physiognomy is usually confounded with the established type of the Indian Bacchus. *Aristotle*, too, in his well-known attitude of meditation, with chin resting on his clenched hand, is occasionally to be seen on really *antique* gems, though with infinitely more frequency on those of the cinque-cento school. *Diogenes*, ensconced within his capacious *dolium* (oil-jar), was a much more fashionable device in times whose extravagant luxury had made the affectation of asceticism the favorite cloak for ambition and knavery.

The order of *Poets* is likewise as fully commemorated by our glyptic monuments. Their distinctive badge is the *vitta* surrounding the head, a thin ribbon tied more loosely than the broader diadem of Grecian royalty. This only applies to the great lights of Hellenic literature, for their Roman successors assumed crowns more befitting the character of their muse. Ovid bids his friends at home strip from his brows the Bacchic ivy-wreath so ill suited to the sad estate of an exile:—

"Siquis habes nostros similes in imagine vultus
Deme meis hederas, Bacchica sorta, comis;
Ista decent lictos felicia signa poetas,
Temporibus non est apta corona meis." ¹

⁸ De Fin. v. 1.

⁹ xxxiv. 1.

¹ Tril. i. 7.

But of such portraits, with the exception of Homer's well-known features (though but a fancy portrait, as Pliny himself confesses²) ; *Æschylus*, recognisable by his tortoise capping his bald pate ; and *Sappho*, by her Lesbian head-cloth,—the attribution of such likenesses is a matter of great uncertainty. This circumstance is much to be regretted, since authentic portraits, so long as the possibility of recognition survived, went back to the very day-spring of art. Plutarch mentions how that Phidias himself got into very great trouble—nay, even endangered his life—by introducing his own figure in the Battle of the Amazons, chased upon the shield of his colossal Minerva, in the guise of a bald-headed old man lifting up a stone : and likewise records how Themistocles rallied the poet Simonides for having his portrait painted, he being of most unsightly aspect.

The absence of all distinguishing symbols is fatal to the recognition of the two great rivals of *Æschylus*, although it were but reasonable to seek for them amongst the same class of memorials. In fact, Visconti has published a cameo representing an aged man enveloped in the *pallium*, whom a female is presenting to a seated Muse ; and supposes that this protégé of Melpomene's has a head much resembling the portrait bust of Euripides found at Herculaneum. The subject he ingeniously interprets as the Muse receiving the Poet from the hands of Palæstra, daughter of Hercules, in allusion to his original occupation of athlete. It is certain that this was the established type for commemorating a successful dramatist. The fine Marlborough gem, No. 393, exhibits a youth holding, to mark his profession, the *pedum* of Thalia, engaged in conference with the Comic Muse, who is seated in precisely the same attitude as Palæstra in Visconti's cameo. And what confirms this explanation, the pair of Bernay silver vases (in the Bibliothèque Impériale), with chasings of Alexander's epoch, give the same design with unimportant variations ; the *thymele* (theatrical altar), being introduced between each pair of interlocutors, as a symbol, intended plainly to declare that some dramatic celebrity was taken by the ancient *toreutes* for his theme.

To this perplexing uncertainty, however, there is one fortunate and remarkable exception in the *Lucretius*, on black agate (formerly Dr. Nott's), inscribed *LVCRE* in the lettering

² *Pariunt desideria non traditos vultus sicut in Homero evenit.*

of his own times ; accepted by the infallibility of the Roman Archaeological Institute, and K. O. Müller, as the unquestionable *vera* effigies of the poet-philosopher. *Virgil's* likeness, however, although beyond all doubt it *must* exist on gems, and on not a few of them too, has hitherto imitated the notorious bashfulness of its original, and shrunk from our recognition. But the anxious longing of the early Italian scholars has imposed upon the world two supposititious heads of strangely differing type ; one, that of a Muse with flowing bay-crown locks (which, therefore, graces the titlepage of Heyne's beautiful edition of the poet) ; the other Apollo's, with short crisp curls, in the Archaic style, perhaps taken from the Etruscan Colossus, standing, when Pliny wrote, in the Palatine Library ; and the very one put by the Calpurnian family upon their denarii. And yet Virgil's face must have been as familiar to the Romans as Shakspeare's is to us, for with them, too, the author's portrait formed the regular frontispiece to his works, as Martial tells us in this very instance :—

“Quam brevis immensum cepit membrana Maronem !
Ipsius vultus prima tabella gerit.”³

But, in reality, we are not left in doubt as to Virgil's personal appearance. The Codex Romanus, written probably in the fourth century, actually gives a full-length figure of the poet, which has every mark of genuineness about it. He is seated in front-face, closely wrapped in his toga, at his desk, a *capsa* of books by his side ; he is close shaved, and his hair cropped short, his face long and thin ; and, so far as the smallness of the drawing permits to judge, with a general resemblance to the portrait of Augustus. Of one thing we may be certain, that the great poet, the most modest of men, would have avoided nothing so much as any conspicuous deviation from the fashion of his own times.

Martial thanks Sortinius Avitus for placing his bust (*imago*) within his library, and sends him an appropriate inscription to be put under it. In another place he speaks of his own portrait as being then painted as a present for Cæcilius Secundus, then commanding the army on the Danube.⁴

The portrait of Horace, equally to be expected amongst these relics, has hitherto evaded all research,—perhaps as

³ xiv. 186.

⁴ ix. 1, and vii. 81.

completely as that of his great contemporary. But the lucky finder will in this case have the advantage of being able to verify his discovery by comparing it with the poet's head upon the *contorniato* bearing his name. Although this medal belongs to the period of the Decline, the head has clearly been copied from some authentic original, such as the statue erected in the forum of his native town. This test the Blacas gem, unanimously accepted for a Horace in virtue of the bay branch and the initial H in the field, does not endure in an altogether satisfactory manner. By the aid of these medals, which have lately proved their own authenticity and source, by serving to identify in the most convincing manner a newly discovered statue of Terence, the gem-portraits of the same poet, of Sallust, Apollonius Tyaneus, and Apuleius, may possibly be hereafter recovered by some sagacious and fortunate collector.

Our invaluable authority for all the details of Roman life, Martial, when celebrating the philosophic poetess, *Theophila*, betrothed to his friend, Canius, seems to have penned his epigram⁵ for the purpose of accompanying a portrait of the lady, as it begins with—

“Hæc est illa tibi promissa Theophila, Cani,
Cujus Cæcopia pectora voce madent.”

I am strongly tempted to recognise this ancient blue-stocking in a female figure, nude, in character of Venus, but with hair dressed in that very peculiar fashion first set by Domitian's empress, inscribed very conspicuously ΘΕΟΦΙΛΑ; which is engraved upon a plasma formerly belonging to the Praur Cabinet.

The practice of rewarding poetic eminence with a statue (Christodorus, flourishing under the Byzantine Anastasius, extols one of Virgil amongst those of early Greece, decorating the Gymnasium of Zeuxippus), was perpetuated down to the last days of the Western Empire. Claudian was thus honoured by Honorius, and with the superadded compliment of the extravagant inscription :—

Ἐν ἔνι Βιργιλίῳ ῥόον καὶ Μοῦσαν Ὀμήρου
Κλαυδιανὸν δῆμος καὶ βασιλεὺς ἔθεσαν.

That the popular poets of the day, besides these sculptural

honours, received also from their admirers the less ostentatious but more imperishable distinction of portraiture in gems, is made matter of certainty by Ovid's pathetic remonstrance, which follows the lines already quoted :—

“ Hæc tibi dissimulas, sentis tamen Optime dei,
In digito qui me fersque refersque tuo,
Effigiemque meam fulvo complexus in auro
Cara relegati quâ potes ora vides !
Quæ quoties spectas suberit tibi dicere forsân
Quam procul a nobis Naso sodalis abest ! ”

A thing hitherto unnoticed, but bearing very directly upon our subject, is the practice mentioned by Statius in his Ode on the Birthday of the poet Lucan. He informs us that it was then the fashion to honour a departed friend by sculpturing his portrait in the character of a Bacchus :—

“ Hæc te non thyasis procax dolosis
Falsa numinis induit figura :
Ipsum sed colit et frequentat ipsum : ”

alluding to the golden bust of the poet placed by his widow, Polla, over her bed as a protecting genius. The disguise of Bacchus was probably chosen for these memorials, because that god was the great establisher of the Mysteries, initiation into which stood the departed soul in such good stead in the world to come. It is not surprising that Bacchic impersonations should have been so popular when, long before, we find Ptolemy Philopator spending all his time, when sober, in celebrating his Mysteries and beating a tambourine about his palace.⁶ A memorable record of this fashion has come down to us in that masterpiece of Roman sculpture, the colossal Antinous of the Lateran Gallery, with ivy-crowned though pensive head, the veritable god of wine in all but its expression of deep thoughtfulness. This belief is furthermore exemplified by a large and beautiful gem (a nicolo in the Heywood-Hawkins Cabinet), with an *intaglio* bust of the same imperial favourite, whose deification is declared by the thyrsus inserted in the field, and still further by the composition, in *cameo*, surrounding the portrait like a frame. On each side stands a Bacchante, one clashing the cymbals, the other waving a torch ; at the top reclines a Cupid, at the bottom a Satyr : all these figures being combined into one

⁶ Plutarch, *Cleomenes*.

design of uncommon elegance and masterly execution.⁷ From all this it is allowable to conjecture that the heads of Bacchus and Ariadne, in which the Roman glyptic art so conspicuously and so lavishly has displayed itself, may not in every instance be *ideal*, but, on the contrary, may often perpetuate the features of the deceased friends of the persons who caused them to be engraved.

Atticus was so great a lover of portraits, that he took the trouble to compose a work on the subject; had it survived to our times, nothing in Roman literature would have been so full of interest. Varro, actuated by a similar predilection, *invented* some method of multiplying portraits both expeditiously and cheaply, for he published a collection in one volume of seven hundred heads under the title of “*Imagines Virorum Illustrium*,” each accompanied with an explanatory distich in hendecasyllabic verse, of which a single specimen only is preserved, the one relating to Demetrius Phalereus:—

“Hic Demetrius æneis tot aptus est
Quot lucas habet annus absolutus.”

But, by a negligence infinitely to be regretted, Pliny has not thought it worth his while to explain the nature of this interesting invention. Nevertheless, his expressions “*benignissimo invento*” and “*aliquo modo insertas*” are much too strong to be understood merely as relating to the obvious and long-established process of drawing such portraits by *hand*. A false reading of *n* for *u* in another passage of Pliny’s has called into existence a lady artist, to whose pencil Varro should have been indebted for his supply of drawings, in the person of Lala of Cysicus, “*quæ M. Varronis inventa pinxit*.” But Jan, by restoring the true reading, “*juventa*,” remorselessly reduces her to a mere miniature painter, who was practising her art with much success at Rome during the younger days of the great antiquary.

But to return to Pliny’s significant expression, “*aliquo modo*;” the words strike my mind as implying some *mechanical* contrivance for effecting the purpose expeditiously and without variation. It is hardly possible to conceive the same portrait to be copied over many hundred times, and

⁷ This gem was first published by Millin in his *Pierres Gravées inédites*, and thence republished by Inghirami, *Monumenti*, &c.

by different hands, in the *atelier* of the Roman *librarius*, and still to remain the same in every one of its repetitions. But, on the other hand, if we call to mind how skilful were the artists then residing at the capital of the world in making all manner of dies, stamps, and moulds of every material used for impressing all substances whether hard or soft, it is possible to conceive something of the nature of *copper-plate printing* to have been hit upon by Varro for the purpose of carrying out his scheme. Certain it is that there are numerous Roman bronze stamps still preserved that have the inscription *in relief* and reversed, and which, consequently, could only have been used with *ink* for signing papyrus or parchment. To this day the Orientals use their signets (although incised in gems or metal), not for impressing wax, but for carrying a glutinous ink, exactly after the manner of a copperplate, and transferring it to the paper requiring signature.

But there is a second method that Varro might have employed, the idea of which has been suggested to me by a remark of Caylus,⁸ applying to a cognate branch of art. He believed he had discovered sure indications that the ornamental borders and similar accessories to the designs upon Etruscan vases had been transferred to the surface by means of a *stencil-plate*, that is, a thin sheet of copper through which the outlines of the pattern are pierced, which being applied to the surface to be decorated, a brush charged with paint being drawn over the outside, leaves the pattern behind at a single stroke. It is very possible to imagine Varro's learning this process of the ancient potters during his antiquarian researches, and his seizing upon the same for the realisation of his long meditated scheme. A set of stencil-plates engraved with the most prominent features of the portraits in bold outline, would reproduce the likenesses in a sketchy, yet effective style, identical with that of the mediæval block-books, and well calculated for expressing the individuality of the heads. The Chinese have from time immemorial produced books illustrated with cuts by precisely the same process as that devised by the monkish precursors of the real printer; and why should not the same notion, suggested by a similar want, have occurred to the ingenious Roman?

⁸ Recueil d'Antiquités, i. p. 17.

Again, I cannot help suspecting that the Etruscan *graffiti* incised designs on gold plates forming the heads of rings (a style of ornamentation so popular with that people) might have been intended for transferring ink to smooth surfaces, after the present fashion of the East. It is self-evident, from the thinness of the plate, these graffiti were not made for impressing wax or clay; and in those primitive ages rings were always worn for some practical purpose, not as mere decorations for the hand.

But to return to my first conjecture—an actual notice of the employment of a stencil-plate is to be met with in ancient history. Procopius, to exemplify the barbarism of Theodoric, states that he was never able to master so much of the art of writing as to sign his own name, and therefore had recourse to the expedient of passing his pen through the letters THEO, pierced through a gold plaque, which was laid upon the document requiring his signature.⁹ This fact looks like the application of a method already in common use, but for some different purpose.

And to conclude, the best testimony to the *originality* of Varro's invention is, as I remarked at starting, to be found in the forcible expressions of Pliny in noticing it; which, therefore, I shall give in full. "M. Varro benignissimo *invento* insertis voluminum suorum facunditati septingentorum *aliquo modo* imaginibus, non passus intercidere figuras, aut vetustatem ævi contra homines valere: *inventor* muneris etiam Deis invidiosi quando immortalitatem non solum dedit, verum etiam in omnes terras misit ut præsentem esse ubique cœu Di possent."¹

⁹ The Greek was glad to make the most of the stupidity of the Goth. The thing that so puzzled Theodoric was not the four simple letters, but the complicated monogram of his whole name in their

outline, such as it appears on his denarii. The Byzantine emperors, like the sultans, always sign with an elaborate monogram.

¹ xxxv. 2.

THE ROYAL TOMBS AT WESTMINSTER.¹

Report of the substance of an Address delivered by Mr. EDMUND OLDFIELD, M.A., F.S.A.,
at the Monthly Meeting of the Institute, on July 2nd, 1869.

IN 1854 the House of Commons granted 2500*l.* for "the repair of the Royal Monuments" at Westminster; but no steps were taken for applying this grant till the formation of the present Ministry. Mr. Layard, to whom Archæology and Art had so often been indebted for valuable services, was then appointed First Commissioner of Her Majesty's Works and Buildings, and in that capacity represented the Government in the administration of any funds the Treasury might now allow for undertaking the long delayed operations. He at once opened the question to the Dean of Westminster, who, as official guardian of the Abbey and all its treasures, warmly responded to any efforts conducing at once to the better preservation of the monuments and their more favorable exhibition, two objects which he held it his duty, as far as possible, to pursue in common. A meeting was accordingly convened, on April 12, 1869, of persons particularly conversant with such subjects. Besides Mr. Layard and the Dean, it included Mr. G. G. Scott, R.A. (the architect of the Chapter), Mr. E. B. Stephens, A.R.A., Mr. James Fergusson, then one of the Secretaries at the Office of Works, Dr. Percy, the eminent chemist, Mr. A. W. Franks of the British Museum, and two or three other gentlemen. After a careful inspection of the Royal tombs, they resolved unanimously on two points. 1. That measures ought to be taken to arrest the dilapidation of the monuments from any remediable defects of structure, such as the rusting of any iron fastenings, or decay of any of the materials. 2. That the monuments should be carefully cleaned with detergents

¹ In consideration of the great public interest now attaching to the question of the proper preservation of our Royal and Historical sepulchral monuments, it has been thought advisable to print the

report of Mr. Oldfield's address in the form of a distinct paper, instead of merely incorporating it in the customary abstract of Proceedings at the Monthly Meetings of the Institute.

known to be innocuous, such as soap and water and ammonia; but no acid or chemical agent to be applied. These operations were to be conducted by Messrs. Poole and Son, the experienced masons employed by the Chapter. Before commencing them, however, Dr. Percy was to analyze the black filmy coating which concealed the gilded surface of the effigies and metallic ornaments, and ascertain how far it was connected with the substance beneath it. It was resolved to begin by cleansing the monument of Margaret, Countess of Richmond, in the south aisle of Henry VII.'s chapel; afterwards to proceed to the larger and more complex tomb of Henry VII. and Elizabeth his Queen, which needed not only cleansing but repair.

[Mr. Oldfield here briefly related the history and described the structure of these two monuments, referring to some contemporary manuscripts and antiquarian books in which they were mentioned.]

The experiments of Dr. Percy at once determined that the black coating was not a natural cuticle of the metal, but simply a concreted deposit of foreign matter, such as coal-smoke, animal grease, and dust. Accordingly, the Treasury having authorised the expenditure of a sufficient sum through the First Commissioner of Works, the monument of the Countess of Richmond was dealt with in manner agreed on, that is, first washed entirely with soap and water, and then the metal parts cleansed with spirits of ammonia. The proceedings were the means of bringing to light three interesting facts, which time, neglect, and ill-usage had concealed.

1. On removing the effigy, which lay unfixed on the tomb, there was found a thin plate of copper gilt, which had slipped underneath, beautifully decorated with portcullises and love-knots in pounced diaper-work. The form of the plate and the position of its rivet-holes showed it to have originally covered the marble top of the sarcophagus or chest of the tomb, on the left side of the figure, and a similar decoration, now lost, had evidently bordered the figure on the other sides.

2. The cushions beneath the head appeared, when cleaned, to be diapered all over with portcullises, fleur-de-lys, Tudor roses, and pomegranates,—an enrichment which, if known to the initiated, had certainly long been invisible to the ordinary eye.

3. On the application of soap and water, the face, hands, wimple, and ermine edging of the mantle were found covered with the remains of pigment, originally no doubt of proper colours, but now all turned nearly black. On these portions no further process of cleansing was attempted.

Parts of the monument, which may be seen in the plate in Sandford's "Genealogical History," are irrevocably lost, including the coronet from the Countess' head, much of the canopy and supporting pilasters of the tabernacle which encloses her figure, and one of the escutcheons from the north side of the sarcophagus. The black marble or touchstone of the sarcophagus itself is in perfect condition; and the greater part of the gilding with which the metal was covered is not merely preserved, but radiant as when new.

Work was next commenced on the great monument of Henry VII. and Elizabeth. On the preliminary inspection it had been apparent, from the opening of a horizontal joint between the bottom of the cover and the sarcophagus or chest, that the former was being lifted up by the corrosion of some iron fastenings within, a force which no superincumbent weight could resist. Unless this were remedied the whole monument was threatened with disintegration and ruin. Consequently it was indispensable to open the sarcophagus. Scaffolding was accordingly constructed, with the aid of Mr. Scott, by which, under the personal inspection of Mr. Layard and the Dean, the two effigies, as well as the slab on which they lay, were raised and carried over the enclosing screen into the eastern apse, where photographs were allowed to be taken of them. The interior of the tomb was thus exposed and its construction ascertained. Iron fastenings were found to have been unfortunately used in two places in immediate contact with marble; first, in cramping together the pieces composing the white marble cavetto immediately below the covering slab; secondly, and still more injuriously, in making four thin flat plates, one at each corner of the sarcophagus, immediately above its cornice and below the cavetto, which plates extended diagonally into the interior, so as to supply fixings for the pins by which the four angels seated above them were secured. [Mr. Oldfield here exhibited diagrams made by Mr. Poole, explaining the details of the construction, and also some detached pieces of the rust, nearly a quarter of an inch thick, which was found above and below

the iron plates.] The whole of these iron fastenings have since been cut out, and others precisely similar in size and shape, but of copper, have been substituted for them. At the same time the decayed wooden washers under the nuts at the inner ends of the bolts by which the metal pilasters of the fronts are held in position were replaced by pieces of stone.

The tomb thus being made secure, it remained to cleanse the surfaces of the marble and the metallic parts by the means successfully applied to the tomb of the Lady Margaret. Owing to the discovery there made of pigment, Mr. Oldfield was desired by the First Commissioner personally to watch the cleansing of the two royal effigies; but notwithstanding the most careful observation, no traces of paint anywhere appeared. Though the modelling of the figures showed the same hand as the Lady Margaret, the surface embellishment was generally less rich, doubtless from the position not admitting the same close inspection. There was no metal plate under the effigies, and no part was diapered. The gilding, however, both on the effigies and the bas-reliefs and decorations of the tomb, was generally better preserved than on the other monument, having been more protected from public contact. The substance also of the monument, and in a less degree that of the enclosing screen, were generally in good condition, though in so large and complex a structure it is not surprising that many details, which it would be tedious to enumerate, have been lost.

The cleaning of the screen was then (July, 1869), still in progress.

The principal discoveries made were inside the tomb, which to all appearance had never before been opened. Its only contents were a gilt stud, with a glass jewel, from the crown of one of the effigies, probably broken off before the covering slab was fixed, and a small bronze ornament, and a piece of ruby glass, apparently not connected with the monument at all. The internal flooring displayed exactly the same workmanship and the same level as that without the tomb, indicating that the whole area was originally finished independently, and the monument placed on it afterwards. This pavement is, of course, better preserved in the interior, and shows an elegant pat-

tern of black marble, divided into lozenges, which are frosted with a tool, and each enclosed within a band, which is polished. But perhaps the most curious discovery was that of a name rudely cut on a stone worked into the brick lining of the sarcophagus.² The inscription may be read as "*scjmedolo*," i. e. *Franciscus* or *Francesco Medolo*, doubtless the name of a mason employed in the construction. He was perhaps brought over from Florence by Torrigiano, in the expedition in which that artist unsuccessfully tried to enlist the services of Benvenuto Cellini.

The proceedings here described had been strangely misrepresented in some letters and paragraphs in the press. Of the two kinds of work done, repair and cleaning, the former had hitherto escaped criticism, perhaps only because it was not yet generally known. But the cleaning of the metal—especially on the Lady Margaret's monument—had called forth various complaints, all alike unfounded. First, it was asserted in a weekly periodical that the whole of the metal had been regilt. When this was disproved, it was alleged that the escutcheons at least had been deprived of the heraldic tints which it was assumed they originally had. Why the colour should have been removed from the escutcheons, where it would probably have been an improvement, yet scrupulously retained on the effigy, where in its present state it is certainly not ornamental, was never explained. There is, however, no evidence in early books or engravings for the former existence of any colour on the armorial decorations; whilst the monument itself, now clearly displayed, sufficiently disproves it to the eyes of any competent observer. For the escutcheons are covered with plate-gilding the same in quality and mode of application as that upon the effigy, and evidently original. Had the artist intended to colour them, he would have left them ungilt, like the tinted parts of the effigy, and any subsequent removal of the pigment would have laid bare merely the ground of copper.

Another weekly periodical, the principal and generally very valuable organ of literary, scientific, and artistic intelligence, had indeed avoided any important misstatement of facts, but had applied to the real facts a nomenclature

² Mr. Oldfield exhibited at the Meeting a plaster cast of this inscription

which had the same effect as misstatement. It had throughout described the operations on the Lady Margaret's monument, though limited to the cleansing which has been here explained, as "restorations." As well might it be alleged that the Elgin Marbles were "restored," when they were cleaned some twelve years since. To "restore," it need hardly be said, is to supply something which is lost ; to *cleanse*, is to remove a special something which, as a late statesman expressed it, is "in its wrong place." In like manner, the same periodical, with equal persistency, described what had been taken from the surface of the metal as "patina." Yet the merest tyro in archæology knows that gold never has a "patina." The whole of the metal here was gilded, and the black coating which had formed above it by the aid of the London atmosphere was altogether foreign to the monument itself. To apply therefore to what really was only *dirt* an unfamiliar and improper Latin name could serve no purpose but to darken knowledge, and mislead the public judgment.

The propriety of the cleaning Mr. Oldfield maintained both on archæological and artistic grounds. Its value to the antiquary was proved by the several interesting features of the monuments which it had recovered from oblivion. Of its artistic results it sufficed to say, that now first, after many generations, it presented the work of the sculptor as he intended it to be seen. Could any one seriously suppose that if it were possible now to refer the question to Torrigiano himself, he would prefer his handiwork to be kept concealed under a modern veil of soot and grease ?

The only plausible objection Mr. Oldfield had heard was, that the general harmony of tint which previously existed in the Abbey was broken by the splendour which two monuments had now resumed. Undoubtedly it was but too true that not only in the Abbey, but throughout London, dirt was more in harmony with surrounding tints than cleanliness. But the remedy was to be found, to borrow a recent political phrase, in "levelling up." Let at least all the monuments within such a precinct as the Abbey be freed from needless impurities by such harmless agents as had here been used, requiring only patience and gentleness in their application. Once properly cleansed, they would, at

any rate for many years to come, require nothing but dusting with a feather brush. And the building being now constantly warmed, their surfaces would condense less moisture from the atmosphere than formerly, and consequently be less tenacious of any floating impurities deposited upon them.

THE SHELL-IMPLEMENTS AND OTHER ANTIQUITIES OF BARBADOS.

By the Rev. GREVILLE J. CHESTER, B.A.

THE small Island of Barbados is mainly composed of a recent coralline limestone, which seems to have been upheaved from the bosom of the ocean in successive and well-marked terraces of elevation. There is not even a fragment of the primary or secondary rocks in the whole island; or, in other words, there is no hard stone. It was therefore a problem to the aboriginal inhabitants, of what substance they should form their weapons and implements for daily use, and it was solved by their employment of the hardest material to which they had access, the shells, viz., of the surrounding sea, such as the *cassis* and *conus*, and especially the great *strombus*, and, when additional hardness was required, the fossil shells which abound in the coralline limestone. It is this circumstance which gives individuality to the implements of the aborigines of Barbados, and renders them peculiarly interesting to the ethnologist and antiquary. Weapons of *hard* stone are, it is true, occasionally found in Barbados, but they are comparatively of very rare occurrence, and were, of course, brought either from the other islands where primitive or volcanic rocks abound, or from the mainland of South America. One example of these was found in a grave, associated with a skeleton which had been interred in a sitting posture. It may perhaps be questioned whether these *hard* stone objects were not used by another or an earlier race, but it is much more probable that the two materials were used contemporaneously. The wealthier people would have been able to afford the luxury of an imported article, while the lower class would put up with those of home manufacture. That the shell implements were the product of Barbados, and Barbados alone, is proved by the fact, that, whereas the superior stone implements are

found in large numbers in islands like Grenada or St. Vincent, which abound in volcanic rocks, the shell implements are only discovered in Barbados ; their inferior quality in point of hardness doubtless preventing their exportation to other places.

The present race of white Barbadians, or "Bims," to whom the desire or habit of scientific investigation is altogether abhorrent, have a notion that, previous to the settlement of the island by the English, in the seventeenth century, it had never been inhabited by any fixed race, and was only occasionally visited by wandering Caribs, as in the case of the fabled island of Robinson Crusoe. This opinion, however, is completely disproved by the extraordinary quantity of implements and pottery which are discovered throughout the whole island, no less in its centre than along the coast.¹ In the parish of St. James, for instance, several cart-loads were found lying together, and with characteristic incuriosity were carried away to "macadamize" a road. Near the Chapel of St. Luke, in a small gully at the very centre of the island, I myself on one occasion picked up no less than seven implements in the space of ten minutes, as well as a quantity of pottery. The favourite spots for the habitation of the shell-workers seem to have been under rock-shelters at the entrance of caves in the limestone rocks, and upon the sloping sides of the numerous "gullies," which form the most characteristic feature of Barbadian scenery, and in whose bottoms water might be readily retained. "Indian River," in St. Michael's parish, and the neighbourhood of the fresh water springs on the borders of St. Michael's and St. James's, and the springs on the Codrington College estate in St. John's, seem all to have been centres of peculiarly dense population. The fact that almost every available inch of land has for years been under cultivation, joined to the great ignorance and want of observation on the part of the inhabitants, has unfortunately combined to prevent the discovery and recording of the burial places of the ancient aborigines. The instance already mentioned, for which I am indebted to Mr. W. A. Culpeper, a young gentleman, a student of Codrington College, who, almost alone amongst Barbadians, takes an

¹ The Rev. Griffith Hughes, in his *History of Barbados*, mentions the discovery of numerous pottery kilns.

intelligent interest in the Archæology and Natural History of the island, is the only one of which I could hear during a year's residence.

The shell implements, of which I exhibited a large collection in the temporary museum at the meeting of the Institute at Bury St. Edmunds, preparatory to presenting them to the British Museum, are of several well-marked distinct shapes.

The commonest type of all is a grooved chisel, in which the natural bend of the shell from which it is cut is taken advantage of to form a handle convenient for the grasp. Ungrooved chisels are likewise of frequent occurrence, and resemble in form the various types of the so-called "celts" of Europe. One of these last, found in digging the foundations of the hospital at Bridgetown, is formed apparently from a *fossil* shell. These implements vary in length from $1\frac{1}{2}$ in. to $6\frac{1}{2}$ in., and some of the smaller ones are very beautifully made. The cutting edge is generally straight, but in some few instances it is formed obliquely. Associated with objects of these two types, there is commonly found a class of implements whose use is hitherto unexplained. They are generally of a long oval form, somewhat curved at one end, and have their under side rough or serrated from the natural grooves of the lip of the shell out of which they are carved. The first which came under my notice, found near Codrington College, and given by me to the Christy Collection, had the irregularities rubbed down, which led me to suppose that it might be a kind of hone; but as this was the case in no other specimen, I have abandoned that idea as untenable. Some of the more rounded specimens somewhat resemble in shape the clay flesh-rubbers made at Siout in Egypt for use in the baths. The largest in my collection measures 6 inches in length by 3 inches in breadth; but two, which are the narrowest I have met with, are respectively 6 inches by 1 inch, and 6 inches by $1\frac{1}{2}$ inch. One is only $2\frac{1}{2}$ inches long by $\frac{1}{2}$ an inch wide.

Another form of shell implement resembles that of a spoon. As in all the specimens of this type which I have seen the handles invariably end abruptly, or appear to be broken off at about the same distance from the edge, I conclude that they were originally fixed in a handle. Besides these types there are small instruments, which may possibly

be javelin heads, formed of the serrated lips of small shells, the serrations being retained apparently in order the more firmly to fix them to a handle with a thong. A perforated *conus* in my possession, which is rubbed down to form a smooth surface upon one side, almost looks as if it may have been intended for a whistle; and this idea may seem the more probable from the fact that large shells are used by the negroes of the present day, as they were in classical times, as trumpets; and indeed ancient shells are commonly found along with other shell implements which had apparently been prepared to serve the same purpose.²

Two facts may be mentioned in connection with this subject.

1. Shell trumpets (if such they be) made from shells of the Gulf of Mexico, have been found in ancient graves in *Canada*. My attention was drawn to one of them in the Museum of the University of Toronto, by Professor Wilson, the learned author of "Prehistoric Annals of Scotland."

2. The characteristic type of *North* as distinguished from *South* American stone implements, is the *grooved* type, that, viz., which resembles the most common form of the chisels of Barbados.

Amongst other objects formed of shell, I have a disk, 1 $\frac{7}{8}$ inch in diameter, slightly grooved with longitudinal marks (apparently the natural surface of the shell) upon one side, which I found with other remains in a small water-course near Codrington College,³ and a small turtle's head presented to me by Mr. W. A. Culpeper, found in the Parish of St. James.

In every place where the shell implements are found there is also discovered a large quantity of fragments of pottery. Some of this displays a considerable amount of design, as is the case with the lip of a vase in my possession, which also is shaped like the head of a turtle. Some vases display variety of colour. Imitations of animals were also made in this material; I have seen heads which may have been meant for those of seals, and I have heard of others being found, intended for toads. Schomburgk, in his

² The slaves in Barbados used formerly to be summoned to work by the blowing of shell trumpets.

³ In the Blackmore Museum at Salisbury there is a similar flat disk formed

of shell, differing only in being slightly larger than the specimen here noticed. It was obtained from a "shell-mound" in Florida. There is another specimen in the Christy Collection.



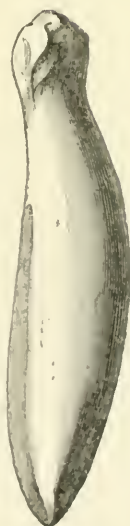
Head, of reddish pottery, found in Barbados.



(Length $6\frac{1}{4}$ in.) Conset Point.



(Length $5\frac{1}{2}$ in.)



Implements formed of shell, found in Barbados.

work on Barbados, quoting from the earlier historian, Hughes, mentions the discovery of a huge pottery idol with its stand, and I myself possess two human heads, in reddish pottery, of which one in particular deserves notice from the great individuality of expression which it displays. I have likewise a singular pottery stamp impressed with a whorl ornament, and the half of a large pottery bead. Entire vases are of rare occurrence, but their excellency of workmanship is extolled by Hughes. The fragments of a huge vase found near Mount Ararat, in St. Michael's, were pointed out to me by the negro who discovered and afterwards broke it. It may perhaps have been of a sepulchral character, as certain South American tribes are reported to bury their dead in pots.



Length $5\frac{1}{2}$ in.

Of antiquities not formed from shells found in Barbados, I have several well made implements of hard green and black stone, one of which is only $1\frac{1}{4}$ inch long. I have also a small and beautifully-formed instrument in the shape of a knife, made of yellowish alabaster, and a kind of stamp of the same material. These last objects were found near the old parsonage and ruined chapel, near the sea, in the parish of St. Joseph, associated with fragments of pottery, pottery figures, and broken implements of hard stone. A civil engineer assured me that he at one time possessed an extraordinary relic found at the same place. He described it as a kind of cuirass or covering for a woman's breasts, formed of shell, beautifully carved with interlacing patterns, and perforated at the nipples. He had also a small crescent-shaped shell ornament, probably for suspension from the neck. Similar objects to this last are not unfrequently found in North America. Under a rock-shelter at Conset Point, I one day picked up a large disk of a fine light-coloured clay,

nearly as large as an ordinary plate. It may be conjectured that this was intended for food. Humboldt, in his "Views of Nature,"⁴ mentions that the Otomacs of the Orinoco eat yellowish-grey balls of this substance, and the same is the case with the inhabitants of a portion of Guiana, Bolivia, and Peru. The immense number of shells which lie scattered about wherever ancient remains are found in Barbados, testify moreover that the ancient shell-workers were great devourers of mollusks.

Representations of the commonest form of shell chisels may be found in Hughes's quaint History of Barbados; and Professor Wilson has given two in his "Prehistoric Man," of which the original of one is remarkable as having a pattern incised upon the back. It was presented to the Professor by Dr. Bovell, a native of Barbados, now practising at Toronto.

It has been asserted that these implements have been found imbedded in the raised beach near a place called the Bat Rock. This I consider as probable, but I was unable to obtain a substantiation of the truth of the report. I have myself found them *upon*, but never *in*, the deposit in question.

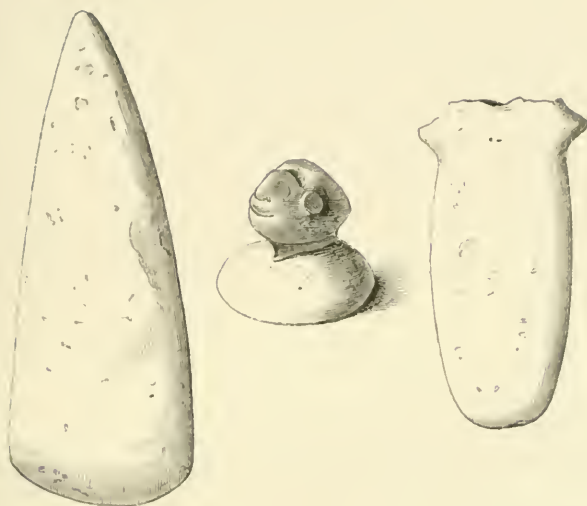
Before I left Barbados, I became aware, through the



No. 1.—Indian cave, or chamber, in limestone rock on the Goodland Estate, Barbados.
Dimensions 25 ft. by 18 ft.

kindness of Mr. W. A. Culpeper of Frolic, Fontabelle, and Codrington College, of the existence of some curious rock-hewn chambers excavated in the limestone in the neighbourhood of Bridgetown, and designated by the inhabitants

⁴ Page 143, English edition.



Length nearly 4 in., of shell.

Original size, of alabaster (?)

The central object is probably a lip-ornament, of shell : orig. size.



Original size.

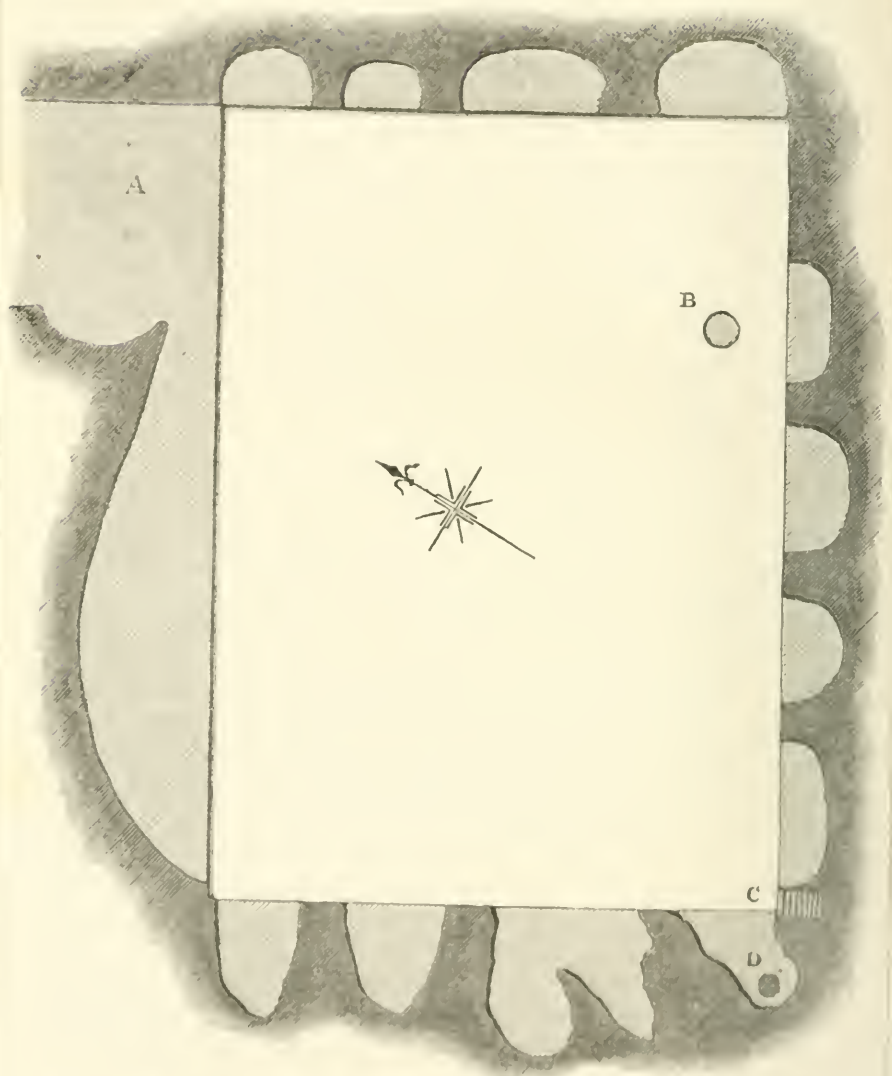
Implements of shell found in Barbados.

as "Indian caves." The peculiarities of these structures are so great, that, whatever be their age, it is desirable that a few particulars about them should be placed on record. The "caves" in question are three in number, and are situated respectively at Lemon Grove, Mount Ararat, and on the Goodland estate, all in the parish of St. Michael, and in a district teeming with the shell implements and pottery of the ancient aborigines.⁵ The "caves" or chambers possess the same common characteristics, all being roofless rooms cut in the coralline limestone rock, and all containing a greater or less number of niches. The simplest of the three (I.), that on the Goodland estate, I was unable to visit, but Mr. W. A. Culpeper has obligingly furnished me with a plan. This excavation is 30 ft. in length by 28 ft. in breadth, and has two niches at its south-western end. The second "cave" (II.) is on the property called Lemon Grove, at Fontabelle, St. Michael's, close to Indian River, and with characteristic barbarism has been turned into a pig-stye by a sporting mulatto who lives in the adjoining house. This excavation contains a modern well, and is approached by modern steps. It must be nearly 40 ft. long by some 30 ft. broad, but the north-west side is dilapidated by time. Twelve niches, varying in width from 5 to 9 ft., remain in the sides of the excavation. The third and most interesting "cave" (III.) is that on the Mount Ararat estate, and is situate on an upheaved rock-terrace close to the sea, and near the remarkable fresh-water springs which burst forth under the waters of the ocean. By the kindness of H. E. Major Mundy, acting Governor of Barbados, who granted me the use of a gang of negro convicts, I was enabled to explore this curious cave, and to discover hard by another chamber of equal dimensions. The "cave" itself was partially filled up with an accumulation of earth, and some tamarind trees had established themselves at the bottom, while an ancient frangipani tree, with its twisted and gnarled stem, leaned over the top. (See woodcuts.)

Having cut down the tamarinds, and cleared the entire cave of the earth and stones with which in course of years it had become incumbered, finding in the course of the excavation a few of the shell implements of the aborigines,

⁵ Others, it is said, exist in the Parishes of St. James and Christ Church, but I have

not been able to verify the truth of the report.



No. II.—Indian Cave, at Lemon Grove, St. Michael's, Barbados. Dimensions, about 40 ft. by 30 ft.

- A. Rectangular chamber, 20 ft. by 10 ft., probably modern, or much changed, the whole north west side of the cave having been much modified and injured.
 B. A modern well.
 C. Modern descent by steps, and door.
 D. A hole now covered up, possibly for exit of snakes, originally, or approach to the cave.
 The niches at the sides vary in width from 3 to 5 ft., the intervening portions of rock 1 1/2 in. to 30 in.

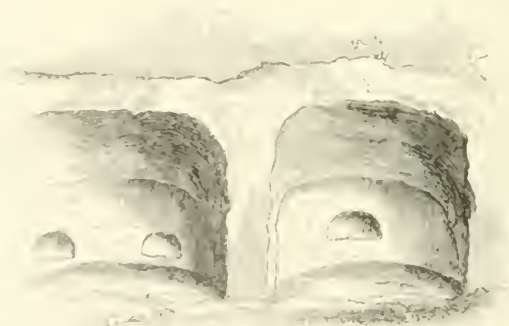
and a few fragments of pottery, the cave presented the features of a room 30 ft. in length by 12 ft. in breadth, with walls formed by the coralline limestone rock. In depth the cave is about 6 ft. All round the walls are a series of rounded arches forming niches. Of these there is one at the north-western extremity, from which an internal arch had originally communicated with the surface, and formed an approach to or exit from the cave. At the opposite end there are two large niches, in one of which I discovered two small internal niches, and in the other one a similar cavity (see woodcut on the next page). On either side of the room are five large niches, two smaller and lower ones being in each case placed alternately between higher ones—an arrangement which gives something of architectural effect to the place. Near the middle of the cave, a kind of circular well-hole has been sunk to the depth of a few feet, with the evident intention of draining off the rain-water which would otherwise have inundated the excavation. The floor is everywhere formed of the solid rock, and the walls are hewn with great regularity and smoothness. It should be remarked that the limestone of Barbados is soft and easily worked, but hardens on exposure to the air.

In the first left-hand niche, reckoning from the south-western end of the cave, I made an interesting discovery. This was a small inner arch, apparently leading to some other place, or to the surface. Seeing this, I caused several holes to be dug in the direction indicated, and was soon rewarded by finding a room or cave of equal dimensions with the first, and lying parallel to it, at the distance of about four feet, and entirely filled with earth and stones. Further excavation proved this cave to have a single niche at either end, and four niches upon each of the sides. These last are, however, differently arranged from those in the sides of the first chamber, two lower and somewhat smaller niches being placed between two higher ones, instead of alternating with them, as in the first instance.⁶ The entrance to this second cave was at the opposite end as compared with that in the other, being at the south-western extremity. Following this entrance arch to the surface, I discovered four curious niche-chambers (not shown in the plan,) placed

⁶ The space occupied by these two caves is about 30 ft. north-west and south-east by 12 ft. north-east and south-west.

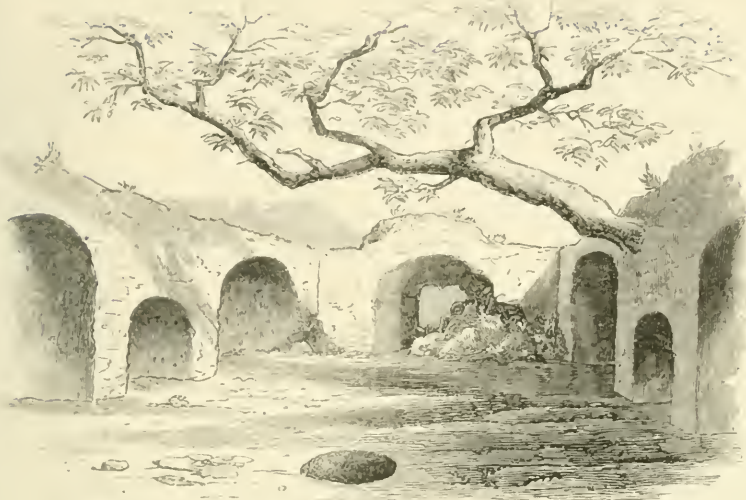
irregularly beside the ascent or exit, one on the left and three on the right-hand side.

The age and purpose of these curious caves I must leave for the decision of those more competent to form a judgment than I am myself. If I might form a conjecture, I should imagine that they may have been constructed as rude temples, and that the niches were intended for the reception of the large idols of pottery, of which, as already mentioned, numerous fragments, and in one instance an entire specimen, have been found in the island. The niches are of such a size as readily to admit a tall man in a sitting posture. There is assuredly nothing of a sepulchral character about the caves, and the fact that all these chambers are open to the sky at the top precludes the idea of their being intended for habitation.

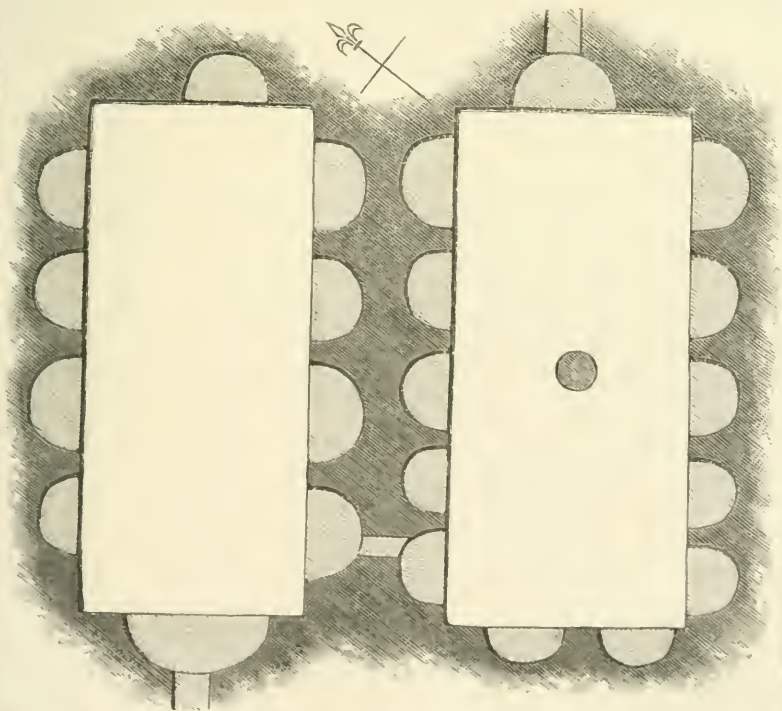


Cave No. III (on the Mount Ararat Estate, Barbados. South western end of the chamber first examined

ANTIQUITIES OF BARBADOS.



No. III. — Indian Cave near Bridgetown, Barbados. On the Mount Ararat Estate. View looking north-east.



No. III. — Plan of the Caves near Bridgetown, Barbados. On the Mount Ararat Estate, shewing the entrance passages, &c. (Area occupied by the two caves about 30 ft. by 12 ft.)



27

Frederick von Schlegel
sowohl in der Zeit als auch
in der Art der Auffassung



17
Forlorned some y grete god
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me in his othe on pe to be gif h
t. philip. his goddes pe lyste pe
but pe holte myte hame goll in h
renten at hys flen pe x^m dme

Xps de frinds y charge yow p^r
for myn hond holder and forgete ho

Original Documents.

LETTER OF SIR HUGH LUTTRELL OF DUNSTER CASTLE, KT. 7—8 HENRY V.

From the muniments of GEORGE F. LUTTRELL, Esq., of Dunster Castle.

THE letter, an excellent fac-simile of which, by Mr. Tupper, is prefixed to these remarks, owes its preservation to its having been annexed, as a voucher, to the Compotus roll of Thomas Hody, the seneschal or "Receptor generalis" of the Honour of Dunster for the 7—8 of Henry V., A.D. 1419—20, which is therefore its date. It is written lengthways upon one side of a "vessel" or half sheet of paper,¹ upon the back of which is the address or superscription, and a red stain, showing the place of the seal. This seal, though here broken away, is found perfect upon other papers of about the same date, and is, in some of them, referred to as the signet of Sir Hugh Luttrell. From one of these, a voucher of 1 Henry V., the appended woodcut by Mr. Utting has been copied. It represents a martlet, one of six which form charges on the Luttrell shield, and is thus used, by a not uncommon practice, instead of the larger crest or more complex coat of arms which appears upon the more formal documents of the family at that period.

The letter has been selected for publication because it is a good example of the style and character of the reign, and besides commemorates a Somersetshire worthy, who took part in the wars and councils of Henry the victor of Agincourt, and was the founder of the Dunster Castle branch of the ancient family of Luttrell. It also establishes the fact, heretofore unknown, of Sir Hugh Luttrell's having held the office of Grand Seneschal of Normandy.

It will be observed that the Saxon character representing "th" is still present, though this, as Mr. Burt informs me, is rather a late example of its use. Under the more modern form of a "y" it continued to be employed down to the reigns of Queen Anne and the early Georges.

The following transcript and translation may be found convenient:—

" . . . wel bilovid sone y grete ȝow well wyth Cristes blessinge and myn Doing ȝow to wite þat y am certefied þat nowht wythstonde my . . . He and comandement be my letteres þat Philipot Stronge is not restorid to his godis Wherof y merveile me þat my comandement may not stonde but what so evere þei be som men plaie þe lord endure as long as þei mai for bei þe grace of God sometime schall y and þanne þe wolde per aventure þei had do my comandement for whanne þei grucche in so litill a þinge and considering hit cost hen nowght no merve . . . þough þei performe not my wille in grettir materis But what betwene ȝow and

¹ In my early years and at the Charter House the half of an ordinary sheet of octavo or note paper was thus termed. The term is given by Pegge, and is found in Le-

mon's Dictionary. Forby gives it also in his East Anglian Vocabulary; it has been derived from *fusciola*, a little strip.

Rich' Arnold þis my lettere and wille y nde 3 . . . hit be excentid
 What so ony man saie þer againe and þat y have no nede to write
 þerfore no more and þenketh þat þoukid be G . . . on live and be þe
 grace of him schalle come home and þat raper þan sommen wolde
 Wherfore taketh afore 3ou Wille Parson and mine bi his othe
 on þe boke 3if he hadde paid and what for þat cause to my resseviour
 and paie hit him again and þat he del . . . to Philipot his godes þe leste
 peniworth þat he can axe at him and þat 3e se this be doon alþinges last
 dere frendes y con ne . . . but þe holi Trinite have 3ow in his keping
 And Rich' Arnold þis schalle be 3owr warant upon 3owr accompte of þe
 pa Writen at Hartlenþe xviii^e daie of Octobre.

"Also dere frendes y charge 3ow þat 3e
 sende me in all godeli haste fische
 suffusante for myn houshold and
 forget hit not in no maner wise

(Your fader Hughe Lutrell
 Knight Lord of Dunsterr
 and Gret Seneschall of
 Normendie

"[Endorsed]

"Unto my right welbelovid sone Johan Lutrell and Rich' Arnold my
 resseyvo' att Dunsterr

delivered"

TRANSLATION.

"[Right] well beloved son, I greet you well with Christ's blessing and
 mine. Doing you to wit that I am certified that notwithstanding my
 [will] and commandment by my letters that Philipot Stronge is not
 restored to his goods. Whereof I marvel me that my commandment
 may not stand, but whatsoever they be some men play the Lord, endure
 as long as they may, for by the grace of God sometime shall I, and
 then they would peradventure they had done my commandment, for
 when they grudge in so little a thing and considering it cost them
 nothing, no marvel[that] though they perform not my will in greater
 matters. But what between you and Richard Arnold this my letter and
 will i nd y it be executed whatsoever any man say there
 against, and that I have no nede to write. Therefore no more and think
 that thanked be God alive and by the grace of him shall come
 home, and that rather than some one would. Wherefore take before
 you Wille Parson and mine by his oath on the book if he had
 paid and what for that cause to my Receiver, and pay it him again, and
 that be del[ivered] to Philipot his goods the last pennyworth that he can
 ask at him, and that ye see this be done [in] all things. Last, dear
 friends I can ne but the Holy Trinity have you in his keeping.
 And Richard Arnold this shall be your warrant upon your account of the
 pa Writen at Hartlen the eighteenth day of October.

"Also dear friends I charge you that
 ye send me in all goodly haste fish
 sufficient for my household and
 forget it not in no manner wise.

Your father Hugh Lutrell,
 Knight, Lord of Dun-
 ster, and Great Seneschal
 of Normandy.

"[Endorsed]

"Unto my right well beloved son John Lutrell and Richard Arnold my
 Receiver at Dunster

delivered."

It would be premature, on this occasion, to attempt a description of the muniments whence this letter has been extracted. They embrace a very copious collection of papers and parchments preserved at Dunster Castle, and relating to the families of Mohun and Luttrell, lords of that honour and fortress from a very early period. Among them are charters, conveyances, law pleadings, inquisitions, leases, court rolls, and seneschals account rolls, for the most part in excellent preservation and good order, having been arranged and catalogued by the celebrated Prynne, who was relegated to Dunster Castle as a sort of prisoner by Cromwell, and thus showed his sense of the kind treatment he met with from the Luttrell of that day.

The letter is not in the handwriting of Sir Hugh, who probably was unequal to such an effort; but the words are no doubt his own, dictated through a secretary.

Sir Hugh Luttrell was the head of a branch of a considerable family reputed to have come in with the Conqueror, and whose chief seat for many centuries was at Iruham in Lincolnshire. They also held property in Notts and Derby, and occur in Leicestershire as benefactors to the Temple Preceptory of Rothley.

The Luttrells of Iruham were barons by tenure, from Geoffrey, in the reign of John, to Robert, fourth baron, who was summoned to parliament in 1295 and died in 1296. His son and descendants, though in the male line, were not summoned. The Luttrells, by marriage with the Paganel heiress, acquired the manor of East Quantocks Head in Somerset, and other lands in the west. Iruham continued in the elder line till its extinction in the reign of Henry V., but East Quantocks Head passed previously to a cadet branch. The main line of this branch also failed, and the manor passed again to a junior Luttrell of Chilton, co. Devon.

Sir Andrew Luttrell of Chilton married Elizabeth (omitted by Dugdale), the widow of Aubrey de Vere, Earl of Oxford, and daughter of Hugh Courtenay, Earl of Devon, by Margaret, daughter of Humphrey Bohun, Earl of Hereford, whose mother was a daughter of Edward I. This lady, whose wealth was equal to her rank, purchased Dunster from the Mohuns in the reign of Edward III., and there finally established her son, Sir Hugh Luttrell, the first of Dunster, and the author of the present letter.

Sir Hugh was styled "Cousin of the King," and as such had, in 1391, 15 Richard II., an annuity of 40*l.* out of the alien priory of Wenge, Bucks. In 2 Henry IV. he was made Steward of the Queen's Household, and soon afterwards Constable of Bristol Castle and Warden of the forest of Kingswood. 3 Henry IV., 1401-2, he was Lieutenant of Calais. In December, 1403, being then a knight, he was at Calais both as lieutenant and as a member of an embassy to the Duke of Burgundy and the Flemish estates. With him were Sir John Croft, Nicholas de Rishton, and John Urban. Several of their letters to various potentates abroad and to the king at home are preserved, and have recently been printed. Those signed by Sir Hugh, extend only from 4 Dec., 1403, to 10 Jan., 1404, when he seems to have retired from the duty. [Royal and Histor. Letters, Henry IV., vol. i. p. 204.] He signs one letter as "*Locum tenens Calisii.*" About this time also, 1403, 4 Henry IV., he and J. Luttrell, probably John, his son, were occupiers of Wenge Abbey. [Proc. of P. C., i. 194.]

25 April, 1404, he was a member of the Privy Council, and present at the discussion as to the marriage of the king's second daughter, Philippa, to Eric, king of Denmark, contracted in May, 1402. 13 May in the same year, having been recommended to the office by the Privy Council, "Mons. Hugh Luttrell" was named Mayor of Bourdeaux. [Proceed. of P. C., Hen. IV., I. 223; and Carte's Gascon Rolls, I. 189.] 6 Hen. IV. he was a commissioner of array for Somerset to raise men to prevent the landing of the French in aid of the Welsh rebels. 11 Hen. IV., Mons. Hugh Luterell was one of five persons appointed for the county of Somerset "Pour chevance fair de monoye al oeups du Roy et de son royaume l'an de son regne unzieme." [Proc. of P. C., I. 343.]

He was apparently in great request under the new reign. 16 Feb., 1 Hen. V., John Sewalle, messenger, was sent specially with a letter of privy seal to Sir Hugh concerning the escape of Sir John Oldecastle. [Issue Roll, 1 Hen. V., p. 331.] 3 Hen. V., August, 1415, he was with the king at Harfleur, and on its fall became councillor to the lieutenant thereof, whom he soon after succeeded in office. His name does not appear as present at Agincourt in October. 4 Hen. V. he agreed, in consideration of 28*l.*, to serve the king in the French wars in person for twelve months, together with twenty men at arms, one being a knight and the rest esquires, and sixty archers. All were to be ready at Southampton by the 4th of May. The Privy Council Records state that, 15 Feb., 1417, 4 Hen. V., Hugo Lut'ell was one of three persons from whom the king was to select a "Miles Constabularius" to accompany him on his voyage. [Proc. of P. C., II. 204, 232.]

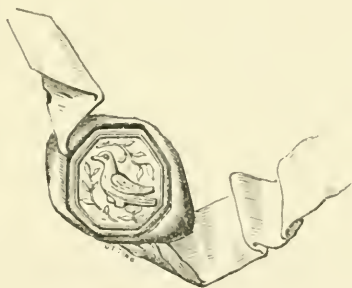
5 Hen. V., 1417-18, he was still abroad, and was appointed to treat for and accept the surrender of the town of Monstreville. The family accounts show that he was actively employed during the three following years, while at the same time the establishment was kept up at Dunster Castle, which he visited annually, and where his wife and his mother resided. 6 Hen. V., provisions to the value of 10*l.* 1*s.* 1½*d.* were purchased and sent to him at Harfleur, and 2*l.* 9*s.* 4*d.* was paid for a pipe of wine for the ladies at home, whose expenses appear in the general house-keeping account. 7 Hen. V. he is styled Captain of Harfleur; and his accounts show that his route to that place lay through Domerham, Hampton or Southampton, Portsmouth, and sometimes Poole. Then, as in the 8 Hen. V., large quantities of stores, salt fish, salt flesh, oatmeal, wheat, candles, coals, horseshoes and horseshoe nails, and occasional sea stores, were purchased and sent to Harfleur; and on one occasion, Richard Arnold, his receiver, took 200 horses homewards from Hampton to Dunster.

At the coronation of the queen of Henry V., in Feb., 1421, Sir Hugh was appointed steward of her household. He is said to have been many times knight of the shire for Devon; for Somerset he was returned as Hugh Luttrell in 1404, and as Sir Hugh in 1414 and 1415. His latter days seem to have been spent at Dunster, where he enlarged the castle, and was celebrated for his hospitality. That he kept up favourable relations with the court appears from a letter addressed by Henry VI. to the Scottish king, in which, upon the complaint of Sir Hugh Luttrell, he requires satisfaction for the harbouring a Spanish ship which had captured one of Sir Hugh's fishing boats and abused the tenants of his port of Minehead. [Coll. H. of Som. II. 40; Lips. Bucks, III. 523.]

Sir Hugh probably died 6 Hen. VI., in which year the Escheat Roll describes as his property Stipelton, Crokkeston, and Ham Moun manors held in co. Dorset of Dunster ; Wolston manor held of Otterton, rents in Shiefeldighes and Byrches in Devon ; Feltwell manor, and a member of the Honour of Castleacre in Norfolk ; Stonhall and Woodhall manors in Suffolk ; and in Somerset the castle and burgh of Dunster, Carhampton manor and hundred, Mynhede and Culfeton manors, 95 acres in Hethfield Durburgh, the manor and church of Estantokysled, and the manor of Sampford Arundel. [Cal. Inq. p.m. iv. p. 115.]

He married Katherine, daughter of Sir John Beaumont of Shirwell, co. Devon, and widow of Sir John Strecche of Devon ; who died 1 Henry VI. Katherine survived both husbands, and had dower of the estate of her second assigned 6 Hen. VI. in Mynehead and East Quantoockshead. [*Ibid.* 470.] She probably died 14 Hen. VI., when the Escheat Roll shows her as seized of nearly the whole of the Luttrell estates in Somerset and Devon. [*Ibid.* 164.] Sir Hugh and Katherine had Sir John Luttrell and three daughters. Sir John appears in his father's accounts as a pensioner at 10*l.*, and as renting small portions of land. He probably died in 9 Hen. VI. The Norfolk property does not appear in his inquisition ; the Devon property is altered, and includes Chilton, an old family estate ; Dorset and Suffolk are unaltered ; Somerset slightly altered. [*Ibid.* 132.] Margaret his wife died 17 Hen. VI., having her dower in Somerset, Suffolk, and Devon.

G. T. C.



Signet of Sir Hugh Luttrell, appended to a voucher of an account 1 Henry V.

Proceedings at Meetings of the Royal Archaeological Institute.

November 5, 1869.

Major-General LEFROY, R.A., F.R.S., V.P., in the Chair.

AFTER some introductory references to the new session, and to the use which might be made of vacation rambles, the Chairman said that he would detail what he had seen at Copenhagen.

The CHAIRMAN gave a short account of the recent meeting of the international Congress of prehistoric archaeology held at Copenhagen, observing that from a variety of accidental circumstances it had attracted less notice in England than usual, and far less than was due, not only to its intrinsic interest, which, under the presidency of Professor Worsaae, could not fail to be of the highest order, but even more to the gracious hospitality of the Danish Court, and the warmth and cordiality with which the Danish people received their visitors. Men of the highest reputation from nearly every country engaged in the discussions. It is sufficient to name Nilsson, Lisch, Quatrefages, Capellini, Villanova, Vogt, Bertrand, Desor, to satisfy anyone who has followed the subject on this point. The congress was opened by his majesty Christian IX. in person, on the 27th August, and this ceremony was enlivened by a very novel feature in scientific reunions, a choral performance of the students of the university of Copenhagen between the addresses. A great variety of patriotic songs were given in the three Scandinavian languages, one of them, "Kong Christian stød ved høed mast!" is well known in England, — a noble and spirit-stirring strain, and, raised by an invisible choir in the great hall of the college, before a brilliant court and an assemblage of *élite* from all Europe, it might have aroused enthusiasm in the late Dr. Dryasdruct himself. It is scarcely necessary to point out that if the proper subjects of a prehistoric congress are still separated by a broad gulf from the domain of Archaeology, it is a gulf which is rapidly contracting. The premetallie age of Europe, what epoch shall be assigned to it in different countries? Were the men of the stone age Brachycephalic, or Dolichocephalic? What race raised the Dolmen of the western shores? Whence came bronze and the art exhibited in the weapons and ornaments of this material? To what extent is the line of demarcation real which has been drawn between an age of bronze and one of iron? It is sufficient to indicate these inquiries to show that if they are ever to be solved it must be by patiently collecting all the scattered facts presented by the discoveries

of every country, and treating the European continent very much as a whole. In this spirit the discussions of the congress were conducted, and if they proved the existence of great differences of opinion among professors, they also furnished many valuable contributions to their science. It appeared to be admitted that there is no trace to be found in the countries of northern Europe of those remote races of the human family which are believed to have coexisted with the mammoth and reindeer in more southern regions, nor can their present uncivilized tribes,—for example, the Laps or Esquimaux,—be regarded as descendants of such races, driven by climate or other changes northwards with the reindeer. The race which accumulated the kitchen-middens had no affinity, either, with the latter: the learned President assigned to these singular features in Danish antiquity a period nearly corresponding to the Dolmen of France, but somewhat earlier; and one of the most memorable days of the congress was devoted to the thorough exploration of one of them at Sælager, near the north-western extremity of the island of Zealand. It yielded nothing beyond their usual contents, a variety of animal remains, a few fragments of coarse pottery, flint knives and chippings, stone axes of a late type, vast masses of the remains of oyster, mussel, and other edible shell-fish, but not of a character to sustain the argument for their antiquity, which has been based on discoveries in other localities. It was pointed out that the people that accumulated these great mounds appear to have possessed no domestic animal but the dog, whereas the Dolmen builders possessed the sheep, the horse, and some others; but this negative evidence cannot go for much in determining relative antiquity, for we should scarcely look for sheep or horses at a fishing village of the present day. The genial and kindly spirit of the Danes shone to great advantage at this fête; the whole country side assembled with their carriages to carry the members of the congress from the landing place to the scene of their explorations; and the return of the steamer up the Roskilde Fiord was made the occasion of an international feast which will not be soon forgotten. The steamer was commanded, in honor of the occasion, by a captain of the royal Danish navy, with truly sailor-like ideas of hospitality; and the Choral Society of Roskilde, which was added to the party, renewed the pleasure of the opening day. The ancient cathedral of Roskilde has been recently restored, and was at a late hour on this occasion lighted up for the inspection of the congress; the residents, who were equally attracted to it, with admirable taste arranged that it should be kept entirely free for their guests, while the Professor Willis of the day pointed out the many architectural and historical interests of the building.

The Chairman remarked that it would be presumption in him to do more than allude to a few of the subjects of discussion at the meeting; and it would be somewhat difficult to do so, as the only reports which appeared at the time were in the Danish language, and were very meagre. A large space was occupied by an account, by Professor Berzelius, of recent discoveries in the harbour of Ysted, which show a subsidence of land of many feet within the historical period, and have yielded a perplexing variety of remains. It is clear that a glacial moraine, formerly dry ground, has gone down; but it has to be explained how such objects as a flint knife, a grave (graa) flint, a fine flint dagger, a bronze collar, and two portions of a bone sword hilt carved with a dragon's head, ever came

into the stratigraphical relations in which they were found by the dredging machine, under a thick bed of sand.

The subject of the commercial relations of the early races received much discussion, and among the objects exhibited, which were not very numerous, was a very large collection of flint implements contributed by Professor Nilsson, proving their manufacture on a scale which may be termed wholesale at Trolldthing in Jutland. Halstadt in Austria, Alaise in the south of France, Villanova, near Bologna, are well known centres of commerce in bronze, and may be assumed to have been among the principal sources of its supply to the rest of Europe. It was insisted by M. Bertrand, however, that there is no proof of an age of bronze in France. The *premier age de fer* in that country and the age of bronze are coincident. This generalization tends to abridge the distance of the latter. Indeed it is scarcely necessary to mention that the notion of well marked successive periods common to large regions, marked by the exclusive use of stone, bronze, or iron, cannot be sustained. The earliest stone age of the north, Norway, Sweden, and Russia, was also stated to correspond to the latest in the south. The remains are all neolithic, and point to their first occupation by races driven from earlier seats, probably by invaders; perhaps by those invaders who brought bronze weapons first into the field.

It was much discussed whether any representation of the human form can be traced to the so-called bronze age, the affirmative being maintained against Desor by Nilsson. This is a question on which archaeologists may throw some light. The Scandinavian countries contributed, as was due, the greatest novelties to the meeting. Among them was a drawing, about 11 ft. long and 4 ft. wide, from a sculptured rock near Ramsunds Borget in Sweden, representing the legend of Sigurd killing the serpent Fafne, contributed by Professor S  ve of Upsala, who attributes it to the eleventh century. M. Lorange had some beautiful objects in Byzantine gold from some Norwegian Viking's tomb; the rich collections of silver objects in the Museum of Stockholm were represented by drawings of full size. Southern Russia also contributed many drawings, the objects, whether bronze or silver, being however almost exclusively of Greek type.

In terminating his remarks on this Congress the Chairman, after alluding to the magnificent entertainment given by the king to the foreign members, took the opportunity of paying a well merited tribute of acknowledgment to the indefatigable attentions of the local officers, M. Wors  e, the President; Professor Steenstrup; M. Waldemar Schmidt, the Secretary; M. Andersen, the Curator of the Rosenberg Museum; Professor Stephens, and others; as well as to the private hospitalities of the principal residents of Copenhagen, whose kindness and cordiality left impressions on all those visitors which cannot easily be effaced.

Mr. JAMES YATES felt sure that the meeting would wish to express their gratitude for the account they had heard of the interesting assemblage at Copenhagen. He had often desired to visit the grand museums which had been formed there, and next to going there nothing could be a better substitute than the discourse that they had heard.

Mr. ATKINSON said he had been present at the Copenhagen Congress, and he fully bore out all that the Chairman had said relating to the cordial hospitalities which had been shown by the Danes on that occasion.

He would add the remark, that whenever any discovery of antiquarian interest was made in Denmark the state always stepped in, paid a fair price by way of compensation, and took possession.

General LEFROY proceeded to give some account of the recent explorations at Edin's Hall, Berwickshire, and of a *veem* in the same neighbourhood, lately brought to light, of which diagrams were before the meeting. A full description, with ground-plans, will be published by the Society of Antiquaries of Scotland.

Edin's Hall will be discovered, in the Ordnance Map of Berwickshire, in the most picturesque part of the Lammer Muir, above the river White Adder, about 4 miles north of Dunse, and in a neighbourhood remarkable for its military remains: the surveyors have marked eight *Camps* in a circle of 2 or 3 miles, two of them are conspicuous from the site. Bearing all the character of the so-called Pictish burghs, of which the one at Moosa in Shetland is the finest specimen now remaining, it presents a great puzzle to the antiquarian, in being found far to the south of any known structures of the kind, and entirely out of the country of the Pictish race, if we accept the usual limits assigned to it; but there appear to be good reasons for doubting whether these structures are Pictish at all. Chalmers affirmed them to be Scandinavian (Caledonia, 1810); and although few, if any, authorities hold that view now, their occurrence in the region colonized by the Scots of Dabriada, and their affinity with circular structures in Ireland, give at least some grounds for the conjecture that they are Scottish. Early in this year (1869) the consent of the proprietor was obtained, by David Logan Home, Esq., and other gentlemen of the neighbourhood, to make a systematic exploration of Edin's Hall, which at that time presented little beyond a green mound, with a little rough masonry visible here and there, in the centre of an extensive system of earthworks. Local tradition connected them with a certain giant who, "once upon a time," made it his abode, and lived, as giants were wont to do, on his neighbours. Returning one day with a bull over his shoulders, he was incommoded by a pebble in his shoe, and jerked it to the side of the opposite hill, where it is still to be seen in the form of a good-sized boulder.

The excavations carried on at the expense of the local society just referred to, have brought to light the entire foundation of a nearly circular building, 92 ft. in external diameter, and in some places 19 or 20 ft. thick, nowhere less than 15 or 16 ft. It is built entirely without mortar, some of the stones are of large size, weighing over a ton, and in some places the walls are now 9 ft. high, but more generally from 4 to 6 ft. This great thickness is entirely solid, with the exception of five chambers, disposed irregularly, one of which leads to a rude stair, which completes the resemblance to a burgh; it doubtless led to the first of several galleries which ran round all these structures in the thickness of the wall, but for what purpose it is difficult to say. They appear to have been without external openings of any kind, and the internal openings, existing, for example, at Moosa, are ill adapted for any purpose of light or defence. It is equally difficult to imagine why such solidity was required, unless, as the Chairman ventured to conjecture, it was to prevent assailants from working their way through the walls by mining. Very few relics of any kind were found, a late bronze fibula being the chief of them; but there are traditions of iron arms or armour having been found in the last cen-

tury. Among the stones was one with deep polished conical holes on each side, evidently formed by friction; examples of which are not unfrequently found. They were possibly used for grinding some pointed weapon. It does not appear necessary to claim a remote antiquity for this class of remains. The earthworks round the castle are on a scale beyond the efforts of a very primitive people. A rough section of these was exhibited, showing a triple vallum in such preservation that the centre ditch is in one place about 15 ft. deep; they have not yet been accurately surveyed. Mr. Skene, in his *Chronicles of the Picts and Scots* (p. cxv.), quotes Tighernac for the defeat of a chieftain, Donald Bree, in the year 638, at a place not identified, but south of the Forth, called Gleninairison, after which Etin was besieged. Edin's Hall is otherwise called Etin's Hall, and there appears no improbability in its identification with the place in question; if so, we are led to the seventh century, at least, for its date. With regard to the *weem*, this very curious and primitive dwelling may be of any antiquity, and bears no relation, except a local one, to the castle just described. It is situated on the property of Colonel Logan Home, at Broom Hall, about 5 miles south of Edin's Hall, and was discovered accidentally in October, 1868. It consists of a sort of underground chamber, 17 ft. long, widening from about 3 ft. at the entrance to 5 ft. at the widest part. This is approached by a passage, somewhat narrower, but nearly as long, turning at a right angle, and at the end of this passage again there is a turn to the entrance. It would appear never to have been more than about 5 ft. high, and one at least of the doorways is only 2 ft. 7 in. high, reminding us of those of Esquimaux dwellings of the present day. When first discovered the flat stones forming the roof of the chamber were entire; there remain, *in situ*, at present only the three lintels shown in the plan. The interior was filled with fine mould washed in, in which were found a few fragments of the bones of deer; the only other trace of human occupation was the unmistakeable evidence of friction on one of the stones, apparently where stone weapons had been rubbed down. A rubbed stone, apparently a celt, was also found among the *débris* at the end. This discovery, coupled with the rudeness and subterranean character of the whole dwelling, carries it back to a very remote age, and to a race whom we may conceive as driven to concealment by more powerful enemies. The situation being high, and the soil fertile, it was probably a dense forest; but it is near enough to the White Adder for the practice of salmon fishing in addition to the chase. It is difficult to place bounds to speculation in relation to the social condition of a people that could, in these islands, resort to such habitations; and the Chairman concluded his remarks by the expression of a hope that those Berwickshire gentlemen who have opened before them such unexpected subjects of archaeological interest, will pursue their explorations in the spirit in which they have commenced, and reap a rich harvest of results.

SIR JERVOISE CLARKE JERVOISE, Bart., drew attention to some South Sea Island weapons, illustrating the mode of hafting or fastening certain forms of "celts" as tools of various kinds. The most remarkable of these specimens was an adze of obsidian, fitted with great skill into a handle formed of the gnarled root of a shrub, in which the natural twist was skilfully adapted to the desired angle for working it. As evidence of the perpetuation of early forms of implements by uncivilized nations, Sir Jervoise drew attention to a well-formed "celt" of iron which had done

duty as an axe. A careful examination showed that it was made from the stirrup iron of a settler.

Referring to the crackled flints known as "pot-boilers" exhibited by him, Sir Jervoise said that they were ordinary specimens of those found in great numbers in the neighbourhood of his residence, Ildsworth Park, Hants. He had brought them in illustration of those sent by Mr. Lockhart. (See p. 68, *infra*.) On a previous occasion he had stated the circumstances of their discovery. (See Arch. Journ., vol. xx. p. 371.)

Mr. J. HEWITT exhibited two specimens of knightly daggers of the fifteenth and sixteenth centuries, and in a rapid survey traced the employment of the dagger from the ancient times of the Assyrians, Egyptians, Romans, and Anglo-Saxons, to the mediæval period; when, from about 1300, the knightly portraiture is seldom found without this adjunct. The variety of forms and decorations seemed to invite a special treatise on the subject, which he hoped would be taken up by some fellow member. Three leading types appeared to have prevailed during the fourteenth and fifteenth centuries: the dagger with cross guard, that with rouelle guard (of which an excellent specimen was exhibited from the Royal Artillery Museum at Woolwich), and a third in which the guard was formed by two knobs or balls, one on each side of the hilt. Of this last fashion an early example was furnished by the monument of Sir Robert Shurland at Minster, Isle of Sheppey, figured by Stothard. In the sixteenth century the knightly dagger took a new form: the guard was fashioned in the semblance of an overhanging leaf of three lobes, while the grip, instead of tapering to the top and bearing a pommel, gradually widened from the guard to the top. A very fine example of this weapon, with its sheath of open-work steel, was exhibited; this specimen also being from the Royal Artillery Museum.

Mr. W. J. BERNHARD SMITH coincided with Mr. Hewitt, and added a few supplementary remarks, concluding with a reference to the arms exhibited by himself.

Mr. J. F. NICHOLLS read a memoir "On the Iter of Antonine, especially that portion between Lansdown and the Severn, showing the probable sites of *Trajectus* and *Abona*."

"Two roads led from *Aque Solis*, westwards towards Caerwent, one of them being the Fosseway, which wound round the brow of the hill under North Stoke, and passed to Upton Cheney; the other led directly over Lansdown to the Roman Camp on its summit, and, descending thence on the west, effected a junction with the Fosseway. Not far distant from the point of intersection, stand two stones from 3 to 4 ft. in height, close by a footpath which leads to the camp on Lansdown; these may have been waymarks, or possibly stones of memorial. The road, which has here dwindled down to a narrow pitched lane between high banks, leads us to Cold Harbour Farm, Wick, on which the remains of a Roman villa, with hypocaust, floor tiles, pottery, &c., were discovered and described in 1865, by that accomplished archaeologist, the Rev. H. M. Searth.

"In 1712, Atkyns states, that in a field called the Beache, about a mile distant from the above-named site, 'Roman bricks of Constantine, and other emperors, together with the ruins of considerable buildings, were found.' Very near the site at Cold Harbour, there stands a cromlech of three stones, 5 ft. out of the ground, 4 ft. wide, and 2 ft. thick, on digging around the base of which, as related by Rudder, Roman and

Saxon coins mixed with human bones were found. Within half-a-mile of these is a tumulus (Barrow Hill); another exists at Bitton, two miles distant; whilst at Upton Cheney, guarding the space between Wick and the Avon, there was a small Roman camp. From Cold Harbour, the road passed westward under the shelter of another Roman camp (Bury House), and here it diverged into two branches. We follow the one which leads in a north-west direction, crossing the present turnpike road at right angles, in the second field this branch of the *iter* assumes the form of a sunken ditch, about ten yards wide, the stone pitching of which crops up in many places, and, where it is not visible to the eye, it may easily be found on sounding through the sod with a stick. This road brings us to Old Cleeve Bridge, which we reach by a causeway, 4 ft. high, 15 yds. long, and 10 ft. broad; the bridge is of one arch of 12 ft. span, without side walls or parapets. From it there leads another causeway made of large stones, some over a ton in weight, which is continued for twenty-seven yards, until it is lost in the steep ascent of the hill, over which the pitched road ascends to Abson, three quarters of a mile distant; where Rudder states that in his day Roman remains were abundant. On the eastern side of this bridge, with its causeways, the country opens into a fertile alluvial basin, which for many miles receives the water-shed of the Cotswold Hills; fourteen centuries since this must have been an impassable morass. On the western side of the bridge the cliffs converge to within fifty yards of each other, and then again expand into a loch of romantic beauty, whose precipitous walls, of carboniferous limestone, rise from the placid water to a great height, and bar all passage. On the northern shore, and on the cliff of greatest altitude, is another Roman camp of about twelve acres in extent. This branch of the road is continued through Puckle Kirk, where Edward was killed in his palace by Leolf, A.D. 946, Berry Hill Camp. Stoke Giffard, where in Maud's nursery grounds it is plainly to be seen, under the camp at Almondsbury, where it joins the Ridgway, a Roman road to Gloucester, and crossing this it continues, under shelter of Aylburton Camp, to the Old Passage of the Severn at Aust.

"Returning now to Bury House Camp on the southern brow of the loch, and exactly opposite the twelve acre camp, on the other shore, of which we have spoken, we take up the *iter* to the westward, where it crosses the River Boyd. The present turnpike road has destroyed all vestiges of antiquity, but we can still see that the little river below struggles through marshy ground, on this the south-western side of the loch, until it finds its way through the golden valley to the Avon at Bitton.

"Here then at Wick, we have two camps of large size, a bridge and causeways, of fifty yards in length, stones of sepulture, Roman villas, tumuli, coins from A.D. 270 to 455, pottery, and other relics, evidencing considerable and continuous occupation, with a Cold Harbour between it and the camp on Lansdown, and a small camp midway between it and the Avon. I submit, therefore, that this was a place of importance; an impassable morass on the east extending for miles, bridged over and thrust through by causeways so extensively at the only point that could be used, and this passage dominated by a camp of twelve acres; that an impassable ravine, with another morass on the western side protected by another camp, and the additional protection of another camp between it

and the river Avon, goes far to prove this to have been the *TRAJECTUS* of Antonine's *iter*. Moreover it is the exact distance from Bath, and is as we have seen the point where several roads (four if not five) met.

"The next station Antonine gives us is *Abona*. Now a line drawn between Wick and Caerwent passes along a road, on either side of, and in close vicinity to which we find many significant names, such as Bridge Yate, Rodway Hill, Rodway Farm, Rodway Bridge, Oldbury, Oldlands, Siston, Rudgeway, Netherways, Horfield, and two Cold Harbours.

"The wear and tear of fourteen centuries, and the high state of cultivation along the main road close to a great city, have obliterated nearly all traces of the *iter*; but at Netherways Hill, seven miles from Wick, I have found traces of a broad stoned road leading directly to Henbury, and forming, I think, not only a part of the *iter*, but also part of a road of circumvallation around the *Abona*, which I unhesitatingly place at the confluence of the rivers Avon and From (Bristol). Here were the *Castra Hyberna*, the Caer Oder nant Baddon was changed to Caer Brito, (the City of the Chasm—to the City of the Britons). Constantine afterwards walled it around, whilst the *Castra Stativa* of the legions of Ostorius occupied the Hill forts which encircled *Abona*. Within seven miles of its High Cross, enclosing it as in a ring fence, are not less than seventeen Roman, or Romanized British camps, viz.:—Clifton, Say Mills (so called from a kind of serge made there about 100 years since), King's Weston, Blaize Castle, Knowle, Berry Hill, Wick, Bury House, Upton Cheney, Hanham, Maesknoll, Cadbury, Faylands, Portbury, Ashton, Bower Walls, and Stokeleigh. Outside these we have another chain of powerful forts, viz., Aylburton, Old Abbey, Horton, Sodbury, Burrill, Lansdown, Dolberry, Worle, and Clevedon Cadbury, all within a radius of fourteen miles of *Abona*, and forming a double ring of forts twenty-six in number, and of immense strength around the city.

"Hanham, Netherways, Westbury, Blaize Castle, and Say Mills, were stations on a road of circumvallation, which in the form of a semicircle, whose two fortified ends, Hanham and Say Mills, rested on the Avon, completely enclosed *Abona*. At all the above stations, as well as in the *pomerium* of the Old City, at the Broad Weir, Clifton, &c., causeways, Roman remains, pigs of lead, glass vessels, and coins of nearly every emperor, down to the evacuation of Britain, have been found. Last year a rude vase with above 1000 coins was accidentally discovered on the Somersetshire side of Bristol. At Netherways, where the *iter* impinges on the road of circumvallation, and forms a part of it, for two miles, to Henbury, are vestiges of earthworks, of which I can nowhere find any account; they are rhomboidal in shape, measuring 275 paces by 150, and are surrounded by a ditch and rampart, in many places, only just discernible. Part of the west front consists of a series of raised terraces, the lowest being at least 30 ft. from the level, and formed on the steep acclivity of the hill: this terrace is about 4 yds. in width, at its back is a bank of 3 ft., then another terrace of about 6 yds., then another bank and a broader terrace of 10 yds.; at the south corner these are protected by a bastion, from which the ditch and rampart are easily traced to the *via strata* on the top of the hill. The Castrametation is not sufficiently marked to lead to the supposition that this was a fort, but rather points to it as being the site of a villa, or perhaps, as Mr. Searth suggests, a Roman village. From it may be traced a road winding around Mont-

pelier, which, as it neared *Caer Brito*, divided, one portion entering the city, the other rising under Prior's Hill Fort, passed close by Lover's Walk, a beautiful avenue of old elm trees, and thence over Durdham Down, where it may be plainly traced in a direct line to Say Mills; this is the road which Seyer mentions, and which he mistook for the *iter* itself; whereas it was simply a short cut between the stations.

"We now return to take up the *iter* at the *via strata* on the top of Netherways Hill; proceeding northward thence for 500 yards, it enters under what has been a triple avenue of old elm trees, and so continued until one branch of it joined the Ridgeway, an undoubted Roman road between Bristol and Gloucester. Before, however, we reach the avenue, we find traces of a water-course which led down to Netherways, and crossing this there is a low bridge; the crown of the arch is now level with the sods; its span may be about 3 ft., its width 18 ft. On the opposite side of the valley, and in a direct line west from this bridge, there is a spot, where it is evident that a similar structure crossed another foss. Following a beaten footpath through several fields we soon reach the remains of a bridge, through which the little brook flows; the bottom and sides are of solid masonry, the arch is gone, but enough remains to shew its great age; its position and connection with so small a stream, point it out as the spot where the road once crossed. Advancing westward in about half a mile we reach Horfield Common, and here the footway expands again into a broad road along which we travel until, as we approach Westbury, the road of circumvallation leaves the *iter*, branching off towards Say Mills, whilst the *iter* itself dwindles again into a narrow pathway which intersects like a wall two deep huge quarries, and then on the top of the hill over Westbury appears again as a stoned road which leads down into the village, at the back of the college, which Chatterton has immortalized as the scene of Rowley's life and Canynge's dying hours.

"From Westbury to Henbury (Blaize Castle), where, on the hill, I have just found two old bastions covered with underwood, we now follow the main road, both places abound in Roman remains; and here we have reached our nine miles from *Trajectus*. We now leave *Abona* (of which this is an out-station,) for the westward, and at about a mile's distance come upon the *alluvium*, over which for $1\frac{3}{4}$ mile the *iter* passes. Here we find, in a soil where naturally not a stone the size of a pebble is to be found, a pitched road called Chittening Street, a name claiming the attention of the antiquary, which leads to the Severn exactly opposite to Caldecot Pill, or the harbour for *Caerwent*.

"The great objection to this route for the *iter* is the fact that it had to cross the marshes, which were supposed to be impassable during the winter months, it being assumed that there was no protection from the high tides of the Severn in those days. But we know that as soon as the Romans conquered Londinium they carefully embanked the estuary of the Thames; this was many years after they had settled and become domesticated in the west. The present sea-walls to exclude the tides were erected by the lords of Berkeley: the first record of them is in the reign of Henry VIII. But in the reign of Henry VI, commissioners were appointed 'to view and repair the banks of the Severn where broken by the violence of the tide.' It is clear, then, that there were sea-walls before the Berkeleys erected the present boundary. Leading from King's

Weston to the Severn there is a clay bank, about 20 feet wide, covered with trees and brushwood, having a deep ditch on either side. Coxe, in his History of Monmouthshire, speaks of this, which he calls 'Whore's Wall,' a corruption, as he thinks, of *Hæduorum Vallum*. Careful consideration leads me to the opinion that the Romans did embank these low lands, and that their wall extended far beyond the present one, taking in what is now known as 'the English stones,' which are still dry at low water, but from which the tides of centuries have swept away the soil. This reef stretches out for two miles, reaching, at low water, to within 484 yards of the opposite shore at Sudbrook Camp. According to tradition, voices could be distinguished across the river at the ferry. William of Wyreestre observes, that anciently the ferry was but '*jactus lapidis*,'—a sling's throw from the English shore.

"Now it is on these stones, to the extremity of which one can walk dry shod even now at ordinary low water, that, as I consider, the *iter* reached the Severn, and the sea-wall skirted its shores. I have no doubt that diligent search in this spot would reward the archaeological investigator. Hall observes, that 'on Charston rocks many Roman remains and coins have been found.' But both Hall and Camden (in his maps) place the Charston rocks to the south of Portskewett, on the site of the English stones, instead of to the north of the New Passage, where it really stands; besides, Charston is a small rock near the Monmouth shore, covered at high water, only large enough for the foundations of a small building, and is in the full sweep of the tide from the shoots. It is evident, therefore, that Hall and Camden have mistaken the name, and that the reef known as 'the English stones' is the spot where Roman remains have been found. Certain it is that wrought stones of large size are found on the site in considerable numbers, and that the short passage of 500 or 600 yards from shore to shore might have been readily made many times during the day. Caldecot Pill, on the opposite shore, is the mouth of the little river Nedern, which flows past Caerwent. In order to keep out the waters of the Severn, floodgates have been erected at the mouth of the Nedern; otherwise, I am assured, at spring tides the flood would still reach to the very walls of Caerwent. This little harbour of Caldecot is protected by the camp at Sudbrook, which has a huge triple ditch and *vallum*, the inner *agger* being nearly 30 ft. in height. Fully one half of this fine old camp has been swept away by the tide; and if the Severn has carried on the work of denudation for fourteen centuries at only half of the rate with which, since Seyer's day, it has gradually destroyed the churchyard of the Chapel of Trinity, of which the ivy-crowned ruins now stand in the foss on the verge of the cliff, the cliff must in the days of the Romans have been at least 100 yards nearer to low water mark than it is at present. From this spot the distance to Caerwent is not more than 3 miles. We have, therefore, by this route the exact distances given by Antonine, viz. — Caerwent to Abona, 9 miles; Abona to Trajectus, 9 miles; Trajectus to Aquæ Solis, 6 miles."

The Rev. HERBERT HAWKINS, in reference to the autograph of Shakespeare exhibited by him, said that he was not able to add any information to the account that had been already given of its discovery. It appeared to be quite uncertain whether the bookseller, from whom his brother purchased the little volume, was aware of the existence of the autograph when he sold it. He had not been able to clear up that point. The

circumstances of its acquisition, and of its lying so long comparatively unnoticed, had been already detailed.

Mr. R. R. HOLMES expressed his entire disbelief of the MS. exhibited being the genuine signature of the great dramatist, and stated at some detail the reasons for his opinion, in which he was supported by his brother officers at the British Museum.

The Rev. R. P. COATES made some remarks in support of the probable authenticity of the signature.

Mr. BURT felt bound to repeat the arguments he had used elsewhere in favour of the genuineness of the signature.¹ The little book in which the signature had been found had evidently been used as a sort of autograph album, in which the collector had pasted the signatures of "John Dryden," "Hugh Middleton," and "William Shaksperc." It was possible that signatures of Shakespeare were more commonly met with or not thought to be so rare at the time when this specimen was placed in the book. But the collector evidently prized it highly. He had given as much as his space would allow of the ending of the letter to which the signature seemed to have been attached, and had carefully covered the decaying fragment with a leaf of silver paper. The circumstances of the formation of the little collection of autographs, of the purchase of the volume eight-and-twenty years ago by the brother of the owner, and its present reproduction, were all so thoroughly genuine that an excellent *bonâ fide* case was made out for it. On the question of the handwriting itself, he thought that the words preceding the signature were greatly in favour of its being assigned to an early period of the writer's life, probably before his very early marriage. Nothing of Shakespeare's handwriting existed but the signatures to his will, to two deeds, and in a book. The genuineness of this last had been warmly contested. He thought that the signature preserved in Mr. Hawkins' Ovid was just what the writer of the signatures to the deeds and will might have written in early life. There were all the characteristics of the later handwritings in that earlier one. The paper had every appearance of being genuine. The variation from the usual form of dating a letter was rather evidence of authenticity than otherwise. Upon a careful consideration of all the circumstances, and the knowledge of the support that his opinion had received from persons highly qualified to judge, he thought a perfectly genuine and most interesting example of the great dramatist's handwriting existed in the autograph exhibited by Mr. Hawkins.

Antiquities and Works of Art Exhibited.

By Mr. C. LOCKHART.—Nodules of calcined flint, known as "pot-boilers," from the neighbourhood of Andover, Hampshire. They have been noticed by the Rev. E. Kell, in a memoir on remains near Andover, and on the site of *Vindunum*, Journal Brit. Arch. Ass., 1867, p. 280.

By Mr. HASTINGS RUSSELL, M.P.—Various bronze celts, weapons, &c., found near Oreston in the parish of Plymstock, Devon, on the estates of the Duke of Bedford, K.G.²

By Sir JERVOISE CLARKE JERVOISE, Bart.—South Sea Island weapons,

¹ In a letter to the *Times*, Sept. 2, 1869, headed "An Autograph of Shakespeare."

² See Mr. Albert Way's memoir on "Antiquities of Bronze found in Devonshire," Arch. Journ., vol. xxvi. p. 329.

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showing modes of hafting especially suited to implements of the "celt" kind; also some crackled stones or "pot-boilers" from the neighbourhood of Idsworth, Hants.

By the Rev. HERBERT HAWKINS.—Autograph of William Shakespeare, and a small book in which it had been placed by some previous possessor. The volume is an edition of the works of Ovid, printed at Amsterdam in 1630, royal 32mo. The second leaf from the beginning is cut down all round, covered with parchment on one side, and on it are pasted the signatures of "Hugh Middleton" and "John Dryden," on small separate slips of paper. A few pages further on another leaf is found similarly treated; on it was pasted a piece of paper, decayed at the lower portion, and on which is the autograph of the great dramatist. This paper is the entire size of the parchment, and was protected by a leaf of silver paper. The autograph has been recently removed from the volume.

By Mr. J. HEWITT.—Knightly daggers of the fifteenth and sixteenth centuries.

By Mr. R. H. SODEN SMITH.—A Roman fibula of silver, said to have been found at St. Albans.

By the Rev. J. FULLER RUSSELL.—MS. letters of Archbishop Laud and Bishop Morton, showing variations in the form of dating letters early in the seventeenth century.

By Mr. BURTT.—Bronze celt of the square Breton type, found in 1860, with 167 others, in an earthen vessel, about 12 in. deep in the ground, near Ergué Armel, $1\frac{1}{2}$ miles from Quimper, and near the Roman road leading thence to Quimperlé. A second vase was found, but empty. The celts were fresh from the mould, the seams not being trimmed off. One only, much ornamented, had been finished up (see Arch. Cambren., 3rd series, V. 185, and VI. 219).—A fragment from a "vitrified fort" in the neighbourhood of Quimper;—specimens of Gaulish pottery found in excavations made in the neighbourhood of Quimper; portion of Roman tile found in the "Camp" near Landudec, Brittany: this camp is probably earlier than the Roman period, and had also been occupied subsequently. It is now called "le vieux presbytère."—Specimens of Roman mortar lining a watch tower at the mouth of the little port of Audierne, Brittany. The building had been two stories high, but only the back wall and foundations of the lower story remain, about 8 ft. by 5, and 6 ft. high. It was one of a regular series of such towers along the coast.

By Mr. W. J. BERNHARD SMITH.—Iron axe-head from the bed of the Thames. The conglomerate in which it is partly imbedded consists of gravel, oxide of iron, bone, and fresh-water shells.—Blade of a kuttar. The two sides present groups of figures, in bas relief, chased out of the solid steel. One represents a man, in Indian or Persian dress, overthrown by a tiger, into whose throat he plunges his kuttar, whilst another man on horseback attempts to assist his companion by darting his lance at the tiger. The other group consists of a horseman attacking an elephant with his lance. The latter is caparisoned, and has his feet secured together by short chains: evidently a scene in an Oriental circus.

By Mr. J. F. NICHOLLS.—A remarkable hoard of Roman brass coins, as believed, of Carausius, Allectus, and other emperors of the fourth century (*minimi*), found in June, 1869, in an urn at Philwood, 2 miles from the camp of Mares Knoll, near Bristol. About 800 of these diminutive pieces were obtained; on some of them letters may be distinguished,

but no perfect devices; with these were found about 200 larger brass coins of Trajan, Hadrian, Antoninus Pius, Faustina, and Gallienus, in defaced condition. MSS. and early printed books from the Bristol City Library, of which the following is a list:—*Biblia Sacra*, on vellum, a fine example of calligraphy, date about 1230, imperfect, containing the text from Genesis to Philemon, fol. This was the copy of the Scriptures used by the municipal authorities of Bristol from the thirteenth to the eighteenth century.—*Missale Romanum*, on vellum, xiv. cent., fol. (Of Hereford use ?)—*Sermones sive Conciones Quadragesimales*, composit. ann. 1286, et rescriptum Thomæ [Arundel] Cantuar. Archiep., ann. 1408, de decimis solvendis rectori de Cranbroke in com. Cantii; fol., on vellum, in good condition. Formerly belonging to Glastonbury Abbey.—*Opus Theologicum*, on vellum, xiii. cent.; fol.—*Opus Philologicum*, on vellum, xiii. cent.—*S. Isidorus Hispalensis de summo bono*, &c., on vellum, xiv. cent.; fol.—*Chirurgia Guidonis de Cauliac* [Chauliac] *Montis-pessulano*, MS., on paper, written by "Johann. Tourtier, magister chirurgie," by order of John, Duke of Bedford, Regent of France and Protector of England; ann. 1363; fol. This curious treatise, greatly in esteem in the Middle Ages, frequently reprinted from the close of the fifteenth century, and translated into several languages, shows the surgical instruments and methods of performing operations; it also presents illustrations of the costume of the profession, with many curious calligraphic details.—John Lydgate's *History, Siege, and Destruction of Troy*, on vellum, with illuminated initial letters; imperfect; fol.—Bateman upon Bartholomew Glanville's work, "*De Proprietatibus Rerum*," a most popular treatise on Natural History and many scientific subjects written by an English Franciscan in the reign of Edw. III., and translated into several languages. This copy of the English translation is much damaged; the initials are illuminated; on vellum, xiv. cent.; fol.

A catalogue of the *codices* in the City Library at Bristol was contributed by the Rev. John Reade to the "*Catalogus MSS. Angliæ*," published in 1697, and may be seen in tom. ii. part i. p. 40. The list comprises fifteen MSS., and amongst these several above enumerated will be found.

By the Rev. RICHARD KIRWAN.—A silver pocket sun-dial and compass, of oval form, measuring $2\frac{1}{2}$ in. by $1\frac{1}{8}$ in., beautifully engraved with arabesques and foliated ornaments. On the reverse are inscribed the latitudes of Paris and the chief cities in France, also of the capitals of Great Britain, Spain, Italy, Holland, &c., and the name of the maker—*Le Febvre A Paris*. This beautifully finished instrument, capable of being adapted to the latitudes 45, 50, 55, was made about 1750; it is enclosed in the original case of fish-skin. Mr. Octavius Morgan possesses, in his extensive collection of dials and horological instruments, two nearly identical with that sent by Mr. Kirwan, similar in the style of the engraving and skilful workmanship. Of these one, rather smaller in dimensions than Mr. Kirwan's, appears to have been made by Butterfield, probably an artificer established in Paris; the other, somewhat larger and of octagonal form, was by *P. L. Le Maire, A Paris*. In Bion's *Treatise on Mathematical Instruments* published in 1752, an octagonal dial precisely similar to those above noticed is figured, and described as a "horizontal dial for different latitudes."

By the Rev. GREVILLE J. CHESTER.—An old map or chart of the

Mediterranean and neighbouring seas ; the arms of the Emperor of Germany, the Sultan, and other sovereigns are introduced on their respective territories

By Mr. AUGUSTUS W. FRANKS, F.S.A.—A small collection of implements formed of shell, from the mounds in Florida. (See Mr. Stevens' "Flint Chips," p. 195.)

December 3, 1869.

OCTAVIUS MORGAN, Esq., M.P., F.S.A., Vice-President, in the Chair.

Mr. R. H. SODEN SMITH, F.S.A., read a notice of a circle of erect stones, in the parish of Crosby Ravensworth, Westmoreland. This memoir is reserved for future publication.

An account of implements formed of shell, and of other antiquities obtained in Barbados, was received from the Rev. GREVILLE J. CHESTER, by whom these relics, that had been exhibited by him in the Temporary Museum at the Meeting of the Institute at Bury St. Edmunds, have subsequently been presented to the Christy Collection. (See p. 43, *ante*.)

A few notes were read on a large Roman *lanx* found at Welney, Norfolk, and brought for exhibition through the kindness of Mr. S. S. LEWIS, Fellow of Corpus Christi College, Cambridge. This remarkable relic will be more fully described hereafter.

Mr. EDWARD TYNDALL, of Bridlington, sent an account of recent explorations of two large barrows on the estates of Sir Henry Boynton, Bart., at Rudstone, in the East Riding of Yorkshire. They form a portion of a group of seven, in which, when some were removed many years ago, many remains of burials were found. The barrows lately opened were full of secondary burials, burnt and unburnt ; in both cases the primary interments had been destroyed by remarkable burials in deep graves, dug into the chalk. In the centre of both barrows cylindrical-shaped graves had been dug, destroying whatever had been previously interred. In one tumulus an opening of very large size, 11 ft. into the rock, had been made, and in it a double cist was formed of stones of oolitic sandstone from Filey Brigg, twelve miles distant. Many of the stones were of very great size, some weighing a ton, or more, and marking the burials as of first importance. With the bodies—both burnt and unburnt—were found pottery and stone implements. The first barrow was 66 ft. in diameter, and 5 ft. high, though greatly ploughed down, and was formed of earth and chalk. At a point 4 ft. S.W. of the centre, and at 4 ft. above the natural surface, lay the body of a woman, on the left side, contracted, the head to the N.W., the left hand on the hip, right hand raised to the face. Before the face was an urn, of the "food vessel" type, covered with zigzag markings. Before the chest lay a small bronze awl or bodkin. At 6 ft. N.E. of the centre were part of the skull and the bones of a man, destroyed by the plough. At and about the centre the mound was entirely made of earth, in distinct conical layers. The section showed that through these, long after the mound had been raised, a cylindrical excavation had been cut, equal in diameter to the grave in the chalk below, and the excavation had been filled in with chalk and earth, showing every line distinctly, and allowing measurements of the greatest nicety. In the filling in, at a point 3 ft. above the natural surface, was a layer or cap of burnt earth and charcoal, 5 in. in thickness. Six in. below,

and at the east side of the circle, was the body of a very young child, on the left side, contracted, the head E. by S.; 6 in. below was the body of a woman, on the left side, contracted, the head E.N.E.; the right hand across the chest, just under the chin; the left hand on the knees. Before the chest was a flint knife, which, as supposed, had been newly made for the interment, and beyond the knife was a bronze drill, having a square centre and both ends pointed. Behind the *pelvis* was a bronze awl and a flint flake, and close by a "drinking cup" of unusual pattern, the outline presenting a waved contour, with alternating hollows and prominences encircling the vessel. This cup was 8 in. high. This burial had disturbed that of a man, whose head was to the S.E.; the corpse had been contracted and on the left side; possibly the bronze awl might have belonged to it. Still descending, and at the line of the natural surface, was the body of a young woman, contracted on the left side, the head to the east, and both hands in front of the chest. Behind the skull was a "drinking cup," 6½ in. high, ornamented over the whole surface with horizontal, vertical, zigzag and chevrony lines, made by a peculiar implement of bone or wood, toothed, and the *apices* of the teeth squared off, thus making angular grooves in the clay. All the patterns were by the same implement, and unusual. The body was laid on a bed of charcoal, and under the feet was a flint knife. Conterminous with the upper cutting and its varied burials, was the grave in the rock, which proved to be filled in carefully with mould only. This grave measured over 9 ft. in diameter, and 10½ ft. deep. From this point the measurement is from the line of the natural ground, and at 4 ft. deep were two large flags of oolitic sandstone, seaworn, standing on edge nearly against the south side. Lying horizontally there were two large stones, 4 ft. 8 in. by 2 ft., and 3 ft. 6 in. by 3 ft. 10 in., and on the top of these, hanging slightly over, was another stone 2 ft. by 1 ft. 10 in. On removing these it was found that they lay on a fourth of equally large size, but wholly in the mould and forming no part of the cists below. They seem to have been spare blocks thrown heedlessly into the grave.

Two ft. below this the top of a double cist appeared, the cist resting on the floor of chalk at the bottom of the grave. The cists formed one structure, and had been erected, as was shown by the slabs overlapping, at the same time. They were N.N.W. by S.S.E., the first of these, to the north was built of four large slabs on edge, with a cover weighing more than a ton, and flagged at the bottom with two lesser blocks. The inner dimensions of this grave were—length 2 ft. 10 in., width 2 ft., depth 1 ft. 8 in. In it, with the head to the south end, was the contracted body of a man of large size and of mature years, at whose feet was the body of an infant, and before the legs another younger infant. In the south-east corner was a drinking cup, quite perfect, 7 in. high, covered with peculiar markings similar to those on the cup previously described. Before the face was an oblong piece of ironstone, calcined, but not a worked implement. Pieces, as if chipped off, were found at both ends, and between the cists. There was a space of 10 in. between the slabs dividing cist No. 1 from cist No. 2, the side stones overlapping. The second cist internally was 3 ft. 8 in. by 2 ft. 7 in., and 1 ft. 10 in. deep. It was formed of two large side stones, and overlapping end stones, a huge cover, and one flag at the bottom. In the centre was an oval heap of burnt bones, 19 in. by 12 in. In the corresponding corner

to cist No. 1 lay another and still more perfect and beautiful "drinking cup," 9½ in. high. This specimen is covered with more varied pattern, formed in the same way as previously described, and showing all to be of a closely allied date. Both cups contained at the bottom some dark-coloured matter—remains of the burial contents doubtless, the nature of which may be ascertained by analysis. Upon the lid of the second cist at the south-end, were two water-rolled whinstone pebbles, of kidney shape, having a "waist," which had been, in both implements, rendered smaller by chipping, thus forming rude hammers. The sharp edges of the chipping on the waists had been rubbed down so as not to cut the withe by which the hammers had probably been hafted. The ends of the hammers showed signs of having been used. One hammer weighed 7 lbs 14 oz., length 10½ in., circumference 8 in.; the other 5 lbs. 6 oz., length 8 in. These implements may have been used to fashion the flagstones forming the cists. All the slabs and covers of these cists were from Filey Brigg, the sea-pitted surfaces being identical with those of the rocks of that part of the coast. It is a very interesting enquiry how these primitive people transported these enormous blocks over such a country as the Wolds for at least twelve miles.

To the west of cist No. 2 were bones of a full-grown person and a child—disturbed bodies. Between the side of cist No. 1 and the side of the grave on the east was a second burnt body, and on the top of the bones was a hammer stone, of reniform shape, resembling those before described, presenting more sign of use, but not "waisted" artificially. One foot to the S.S.E. of the burnt bones was a "drinking cup," 7 in. high, and ornamented similarly to the others. The finding of "drinking cups" with burnt interments is exceedingly rare—they are almost invariably accompaniments of inhumation. Bateman, it may be mentioned, assigned to the "drinking cup" a period anterior to the time of metal; this Canon Greenwell has now disproved, two instances of drinking cups associated with articles of bronze having occurred.

Throughout the cutting above the grave, and also in the grave itself, were found remains of disturbed bodies, also fragments of "drinking cups," and a bone pin. These were, doubtless, associated with some of the bodies disturbed in making the secondary circular cutting, for which purpose an earlier tumulus had clearly been made use of. In the materials of the barrow, thrown in promiscuously, were animal bones, great quantities of flint chippings, five round "scrapers," and three saws of flint, the latter having teeth polished by use, a stone "pounder" used over the whole surface, as shown by the numerous facets, and potsherds of the usual British pottery. With all the bodies there was charcoal in greater or lesser quantity. The great central grave in the rock had the sides plastered with clay and rubbed smooth; the part in the forced earth of the barrow was also smoothed, but not plastered with clay.

The second barrow was 78 ft. in diameter, and 6 ft. high, formed of chalk and earth, in layers. This mound had a trench round it (within the circumference) 4 ft. wide at top, tapering to 2 ft. at bottom, and 3 ft. 6 in. deep, in solid chalk. The inner diameter was 40 ft. On the encircling line of the trench, at intervals of 12 ft. to 16 ft., occurred divisions of unexcavated chalk, not reaching to the top, forming, in fact, a series of troughs round the barrow. Upon the natural surface was a stratum of hard, tempered, cement-like soil, 8 in. thick; so hard as almost to

resist the pick. At 11 ft. south-east of the centre, and a foot above the natural surface, was the body of a woman, contracted on the right side, and the head to N.E. by E., the left arm to the knees, the right hand to the face. Behind the head was a bone pin. At 6 ft. S.S.E. of the centre, and 16 in. above the natural surface, was the body of a man, on the left side, head to E.S.E. The body was in a circular hollow, cut through a layer of chalk, and resting on the tempered floor. At 30 ft. E.S.E. of the centre, was a body on the right side, head to S.S.W. Being near the surface, this burial was destroyed by driving sheep net stakes. At 16 ft. S.E. and E., in a hollow 3 ft. in diameter, and 4 in. into natural ground, lined with wood slightly charred, lay the remains of a very young child, head to the south, on right side. Before the face was a nearly globular urn, 4 in. high, ornamented by punctured impressions over the whole surface. At 7 ft. S.E. by E., and 20 in. above the natural surface, was the body of a young person, on the right side, the head to S. by W., the hands up to the face. At 4 ft. south of centre was a body on the left side, with head to S.E. by S., lying on the natural surface, the right hand on the knees, the left up to the face. One foot above this body was another of a young person lying on the left side, with the head to the west. On the east side, and just within the circumference of a central circular grave, and 6 in. above the natural surface, was the body of a man on the right side, head to the west, the right under the head, the left raised to the breast. There was a plank of willow on each side of the body, the planks being 3 ft. 6 in. long, and 1 ft. 6 in. apart. It was not a coffin, but merely a wooden protection placed on each side of the corpse. In front of the head was a "food vessel," with four unpierced ears, covered with impressions formed by the end of some instrument. Close by the urn and skull was a perfect, large barbed arrow point of flint, fresh as the day when made. The point was turned away from the head, and it is probable that the shaft was held in the right hand when interred. With the arrow was part of an ammonite, doubtless a sort of charm. The burial was that of a round-headed man (*brachycephalous*), with the lowest developement of forehead and the most debased skull conceivable for a human being. As in the first described burrow, so in this, the original mound had been cut through to form the central grave below, and, in filling in, bones of more than one body, portions of a ribbed "drinking cup" were mingled with the earth, having been destroyed. At 1 ft. 4 in. east of the grave, on the natural surface, was a body on the right side, the head to N.N.W., the hands together in front of the knees. At the centre was the grave in the chalk, $6\frac{1}{2}$ ft. east and west, and $5\frac{1}{2}$ ft. north and south, and 5 ft. deep. Three ft. 6 in. deep in the grave was a burnt body, and below it, on the bottom, a man on the left side, head S.E., the left hand on the hip, the right hand to the face. The burial was in a dried cavity, of which the chalk formed the bottom, and the sides were of burnt earth and charcoal. Behind the hip, and just out of the cavity, was a thin flint scraper. In the grave, and through nearly the whole mound, were remains of disturbed bodies, showing that the burrow had repeatedly been used. Mixed with the material forming the hill were animal bones, all broken for marrow; a large quantity of chips, cores, &c., of flint, ten round flint scrapers, one of the most beautiful workman'ship; another smoothed by long use, four saws, two drills, one of them curved; three knives and a chipped knife or spear point, all of flint; also three stone pounders, one small pierced hammer stone, show-

ing effects of use ; and a beautiful jet armlet, $2\frac{1}{4}$ in. in diameter. The skulls from the several finds, with the exception of two, which are decidedly *brachycephalic*, are all of a type partaking of the characteristic features of both races of Britons.

Mr. TYNDALL communicated also a short notice of ancient pit-dwellings or hut-circles that mark the site of a British village near Bempton, about four miles from Bridlington, in a field now in the occupation of Mr. Watson, and on the property of the late Mr. George Walmsley. There are seventy of these sites of huts, forming two groups, in fair preservation, separated by a straight level road about 65 ft. in width. The entrances are towards this ancient street, their aspect being S.E. and N.W. The pits measure, on an average, about 15 feet in diameter, but some are larger ; in a few instances they are lined with cobble-stones or small boulders from the bottom to the top, and in these rudely-walled pits have been chiefly found the calcined stones or "pot-boilers," doubtless used in primitive cookery, either in some process of baking, as used even at the present time by some savage peoples, or for heating water, before any vessels were made that would bear exposure to fire. The village extends over an area that measures about 150 yards in length, by 75 yards in breadth, including the road before mentioned. Professor Phillips has given, in his "*Rivers and Mountains, &c., of Yorkshire*," pp. 202, 204, some valuable observations of three types of ancient circular dwellings in various parts of the county, including a village of pits, called, in some parts, "refholes," namely, roofholes.³

Antiquities and Works of Art Exhibited.

By Mr. ALBERT GOODMAN of East Shalford, Surrey.—A large flat Roman charger or dish, of mixed metal, found on his estate in the parish of Welney, Norfolk, about six miles north-east of Ely, and near the course of the river Lark towards Wisbeach and the Wash. The village is near the point where the boundaries of the three counties meet. This remarkable relic of Roman occupation in the Fen district was sent for exhibition through the obliging suggestion of Mr. S. S. Lewis, Fellow of Corpus Christi College, Cambridge ; it was found in the spring of 1864, on a farm in the occupation of Mr. G. E. Daintree of Fenton, near Huntingdon, by whom the following particulars were stated. It lay about 14 in. from the surface in ploughing ; the district is entirely fen land, consisting mostly of decomposed vegetable matter, in which horns of the red deer are often brought to light, also hazle-nuts in abundance, with other remains of ancient vegetation, about 1 to 10 ft. below the present surface. This object is undoubtedly a *lanx*, an appliance of the table, to which, as Mr. Lewis observed, the epithets *panda*, *cava*, and *rotunda*, are appropriately applied by ancient writers. The metal proves, by analysis, to consist of 80 per cent. of tin, with about 20 of lead, nearly corresponding with the *argentarium* of Pliny. The dish measures nearly 29 in. in diameter, and weighs 30 lbs. In the centre there is a round compartment, about $8\frac{1}{2}$ in. in diameter, enriched with a beautiful and peculiar diapered pattern, apparently produced by the hammer and small punches or chisels. The entire surface has become decayed, and portions of fen vegetation adhere to the exfoliating metal, so that the design, of which, by Mr. Goodman's courtesy, a full-sized diagram was shown, is not easily to be distinguished.

³ See also Dr. Young's *Hist. of Whitby*, vol. ii. pp. 673, 680.

By Mr. R. G. P. MINTY.—A bow of horn, well polished, and resembling in form the ancient Grecian or Parthian bows that have a double curvature, probably caused by their being constructed of two curved horns united at the handle. This relic had been found, as stated, in the Cambridgeshire Fens, between Ely and Waterbeach, and it came into Mr. Minty's possession through his relative, the late Professor Miller of Cambridge. Its length, when complete, was about $42\frac{1}{2}$ in. ; it was formed of a single horn, and one end, where the horn had joined the skull, has been broken off. The object, of such unusual description, had been sent for inspection by Mr. Minty at a previous meeting, in 1856,⁴ and it was again exhibited on the present occasion as a remarkable example of the varied nature and curious character of the relics that are constantly brought to light in the Fens, including numerous antiquities of British date, with a profusion of Roman coins, works in metal, pottery, and other evidences of extensive Roman occupation. The supposition that Mr. Minty's bow may be of very remote antiquity has, however, been disputed ; but, considering the great durability of horn, there appears to be no improbability in the supposition that this object may have been brought to Britain by some soldier in the service of the Empire, and accidentally lost in the fens. On Roman sculptures in England such a bow was formerly seen carried by a soldier, whose figure, now destroyed, had been carved on a rock near *Habitancum*, and its fashion is shown likewise on a sculpture at Housesteads.⁵ The late Mr. Kemble has remarked that the "horn-boga," or bow of horn, is mentioned in the Anglo-Saxon poem of *Beowulf*, and in other writings of that period.

By Mr. EDWARD TYNDALL, of Bridlington.—Three photographs, representing sepulchral cists, urns, and stone hammers, found in excavations made by the Rev. W. Greenwell at Rudston, near Bridlington, Yorkshire.⁶—Photographs of the columnar stone at Rudston (the *Rodestane* of Domesday), the finest specimen of a menhir in Britain, and which probably gave the name to the village in the East Riding of Yorkshire, in the north-east corner of the churchyard of which it is situated. This stone measures $29\frac{1}{2}$ ft. above the surface of the ground, and reaches more than 12 ft. below it, giving a height altogether of 41 ft. 6 in. Col. Forbes Leslie, in whose valuable "*Early Races of Scotland*" these particulars are given, observes that "in the absence of record or tradition regarding this monument, with the fact of pagan fanes being adopted as sites for Early Christian churches, and the church at Rudston being contiguous to this obelisk, it is reasonable to conjecture that it was once an object of worship or portion of a heathen temple."⁷ Mr. Bigland, in his account of this stone in the *Beauties of England and Wales*, states that the material is the coarse rag, or mill stone grit, and that it stands at nearly forty miles from any quarry where this stone is found ; he had sought in vain for any

⁴ Some further particulars may be found, *Arch. Journ.* vol. xiii. p. 412.

⁵ This figure was known as *Rob of Riddingham*. See Bruce, *Roman Wall*, third edition, p. 352, and the figure at *Housesteads*, *ibid.* p. 197. On Trajan's column the *Pactians* and *Sarmatians* appear using similar bows, as also German warriors on the Antonine column.

⁶ These photographs may be obtained from Mr. Shores, at Bridlington.

⁷ Forbes Leslie, *Early Races*, vol. i. p. 258 ; the Rudston stone is figured with a memoir by Pegge, *Archæologia*, vol. v. p. 95. See also Camden's *Brit.* edit. Gough, vol. iii. p. 320 ; Drake's *Eburacum*, p. 26.



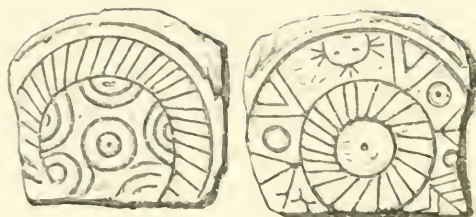


Fig 1 —10 inches in each direction

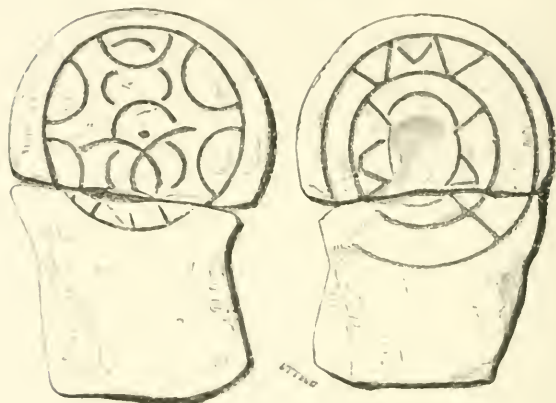


Fig 2. —2 ft. 9 in. by 1 ft. 9 in



Fig 3—3 ft. by 1 ft. 4 in

Carved head stones (obverse and reverse)

Found in the foundation of Adel Church, Yorkshire

local tradition connected with the monument, which, as he remarks, is of the same fashion and description as the remarkable monoliths near Boroughbridge, the "Devil's Arrows."⁸ The largest monolith hitherto noticed amongst the primitive remains of this description is the great menhir at Loc-Maria-Ker, in Brittany, now prostrate and broken into four pieces. Its length, the fragments united, has been estimated at 61½ ft., the weight not less than 260 tons.⁹

By the Rev. H. T. SIMPSON, Rector of Adel, through Dr. WAITE, M.D. —Photographs of four rudely-carved stones found in the foundations of the church of Adel, in the West Riding of Yorkshire, having been worked up as walling material. They are here figured. The small Norman church at that place has been ascribed to the reign of Stephen, and, as alleged, it was rebuilt by the monks of the Holy Trinity, York, to whom the parish belonged. The fabric, of considerable value as an example of the middle of the twelfth century, free from any mixture of later architectural styles, is remarkable, amongst other features, for its south porch, its font, detached piscina, and a highly enriched chancel arch. A bronze door-handle with a large ring attached deserves to be noticed; its highly

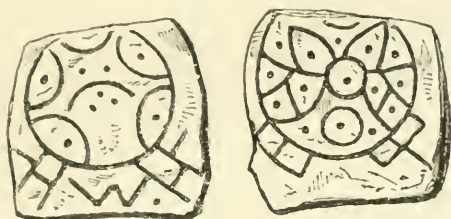


Fig. 4.—Fragment of a carved head-stone, Adel Church. Dimensions 1 ft. 6 in. by 1 ft. 5 in.

wrought details were concealed until the surface was cleaned by the direction of Mr. Simpson; it represents a monster holding a human head in its jaws. It is asserted that any offender pursued by the officials of justice might claim privilege of sanctuary, if he could grasp the ring of this handle. In the parish of Adel there are British remains, pit-dwellings, a monolith, &c.; there is also a Roman entrenchment, the place being on the Roman road from Ilkley to Bramham Moor. Two sepulchral inscriptions have been found, and Horsley notices a sculpture of the *Dæe Matres*; a rudely carved slab, also, found with Roman remains, and bearing the *phallus* with the words—PRIMIVS MINTLAI, OR MENTLA.¹

From the position in which the carved stones, of which photographs were brought by Dr. Waite, had been found—in the ground-work of a church of considerable antiquity,—the absence also of any decided type, Roman, Anglo-Saxon, or Norman, in their design, and the occurrence at Adel of so many evidences of early occupation, Mr. Simpson had been disposed to regard them as of a very remote pagan period, and as allusive,

⁸ Figured by Mr. Eeroyd Smith, *Reliquiæ Isuriane*, p. 7, pl. 1.

⁹ Forbes Leslie, *Early Races*, vol. i. p. 258, pl. xxv. The weight of the Rudston stone, as estimated by Pegge, has been supposed to be from 46 to 56 tons.

¹ A cast was sent to the Museum of

the Institute at the York Meeting, 1846; *Museum Catalogue*, p. 10. See Whitaker's *Loidis*, vol. i. p. 175. Stone coffins, querns, and various other relics present evidence, as pointed out by Mr. Simpson, of early occupation.

possibly, to the worship of the sun and moon. Such a supposition seems, however, very questionable; Professor Westwood, who has paid special attention to early relics of similar description, memorial crosses, head-stones, and the like, considers the relics with one exception (fig. 5) to be undoubtedly head-stones of some time ranging from the eleventh to the thirteenth century. The type may be recognised as a rudely-fashioned cross, the upper part consisting of a wheel-shaped design in which the tradition of the customary cruciform heading is scarcely discerned. Professor Westwood remarked that with difficulty, and after careful comparison of early memorials, he had been able to trace a cruciform idea. He referred



Fig. 5.—Carved stone, Adel.
(30 in. by 31 in.)

to certain examples of ancient round-headed gravestones, discovered in the foundations of Bakewell Church, and probably of the eleventh or twelfth century.² On one of them the round head bears a kind of wheel-shaped design, with six spokes; others also present general resemblance in ornament to the curious head-stones found at Adel. Early examples of head-stones are rare, and the examples brought to light by Mr. Simpson are well deserving of notice; they are moreover singular as having incised designs on both faces. The fragment,

fig. 5, found on a moor, near Adel, ornamented on one face only, may have been a portion of wall-diaper, or destined for some other purpose not easily to be ascertained; it is probably of early Norman date.

By the Rev. R. P. COATES, F.S.A.—A knife, single-edged, with an ivory handle sculptured with considerable spirit and skill (see woodcuts). It is probably one of a pair of carving-knives, such as were used by the official *écuyer trenchant*, or *trancheator*, and carried in an ornamented sheath; there was frequently a third smaller knife with the two of large size, of which last one was intended for taking assay of the viands. The knife exhibited measures in length $17\frac{1}{4}$ in.; the ivory handle $5\frac{1}{4}$ in.; the breadth of the blade is $1\frac{3}{8}$ in. On each side of the blade is inscribed ANNO 1555. This handsome specimen, which may be of Italian workmanship, has been in the possession of a family at Dartford, Kent, and of their connexions, for the last eighty years. Of the ceremony observed in carving at the table of the sovereign or noble see Notes on the word "Kervare before a lorde," Prompt. Parvulorum, p. 273; the chapter "De cultellis domini," in the Treatise on the officials in lordly households, Boke of Curtasye, Pub. Percy Society, p. 28, and many particulars in "The Babees Book," a collection of treatises on Manners and Meals in olden times, edited by Mr. Furnivall for the Early English Text Society.

By Mr. OCTAVIUS MORGAN, M.P.—A small oblong octagonal object, height nearly 3 in., diameter 2 in., supposed to be a chrismatory, of rock crystal with silver gilt cover and mountings, and of very beautiful

² See Arch. Journ., vol. v. p. 257; 4, 79; Journ. Brit. Arch. Ass., vol. ii. Cutler's Manual of Cross Slabs, &c., plates pp. 256, 304.



Ivory-handled Knife, date 1555.

Length, the handle included, 17 $\frac{1}{4}$ inches.

workmanship. In the crystal two cylindrical cavities, about half an inch in diameter, have been hollowed out, to contain the holy oil and chrism used in baptism. The lid is decorated, in four compartments, with the initials H and K united by a true-love knot tasseled, as on the armour of Henry VIII. in the Tower Armoury, and in sculptured ornaments at Hampton Court. Mr. Morgan is of opinion that this beautiful object may have been part of the appliances of the Royal Chapel, and have been used for baptisms of the children of Henry VIII. and Katharine of Arragon. Being intended for the rite of baptism only, the third receptacle, namely that for the oil used for the sick, as usually found in a chrismatory, is here wanting. It must, however, be noticed, that no symbol whatever or ornament of a sacred nature occurs in the decoration of this charming example of cinque-cento taste.

By Mr. J. PIGGOT, Jun., F.S.A.—The head of a pastoral staff, sculptured in ivory; date, probably the seventeenth century, copied from an earlier work.

By Mr. HENDERSON, F.S.A.—A writing standish, made from the mulberry tree planted by Shakespeare at Stratford-on-Avon. It was presented by order of the mayor, aldermen, and burgesses to Mr. Henderson's maternal grandfather, George Keate, on occasion of the Jubilee, May 3, 1769. Mr. Keate, well-known by his poetical and literary performances, was the companion of Garrick at that festival.

By Mr. WALTER H. TREGELLAS.—The seal of Sir Walter Bluet, a brass matrix lately found in excavations in Westminster. It is of circular form, diameter rather over an inch, the device being, within a very elegantly fashioned panel enriched with pierced tracery, a small escutcheon placed aslant (*en cantiel*) and charged with the following bearing,—on a bend cotised three sex-foils pierced. The escutcheon is ensigned with a helm and mantlings, the crest being the head of a griffin ducally gorged, resembling that borne by the Despensers. The legend, in black letter, is as follows,—S: WALTERI BLUWET: MILIT'. The bearing on this beautiful seal, the design of which resembles that of several examples of the time of Richard II., differs wholly from that ascribed to the various families of the name, in Cornwall, Devon, Somerset, Hants, Gloucestershire, &c. In the Roll of Arms, of the reign of Edward II., edited by the late Sir Harris Nicolas, p. 78, occurs, under Gloucestershire, "Sire Walter Bluet, de or ā un cheveron e iij. egles de vert." It has been suggested, with some probability, that the bearing on the seal may have been a "canting coat," the flowers being intended to represent the blue corn-flower, called in French *bluet*. Rymer has printed letters of protection, dated June 14, 1369, granted by Edward III. to Sir Walter Bluet and others, going abroad on the king's service.

Archæological Intelligence.

THE Annual Meeting of the Cambrian Archæological Association will be held at Holyhead, commencing on August 15, under the presidency of the Ven. Archdeacon Wynne Jones. The ample variety of subjects of antiquarian investigation in Anglesey, of which some remarkable examples have lately been brought before the Institute, will present more than ordinary attractions. Full information regarding the arrangements may be obtained from the Rev. E. L. Barnwell, Melksham.

The congress of the British Archaeological Association will be held at Hereford, in the first week of September. Mr. Wren Hoskyns will preside.

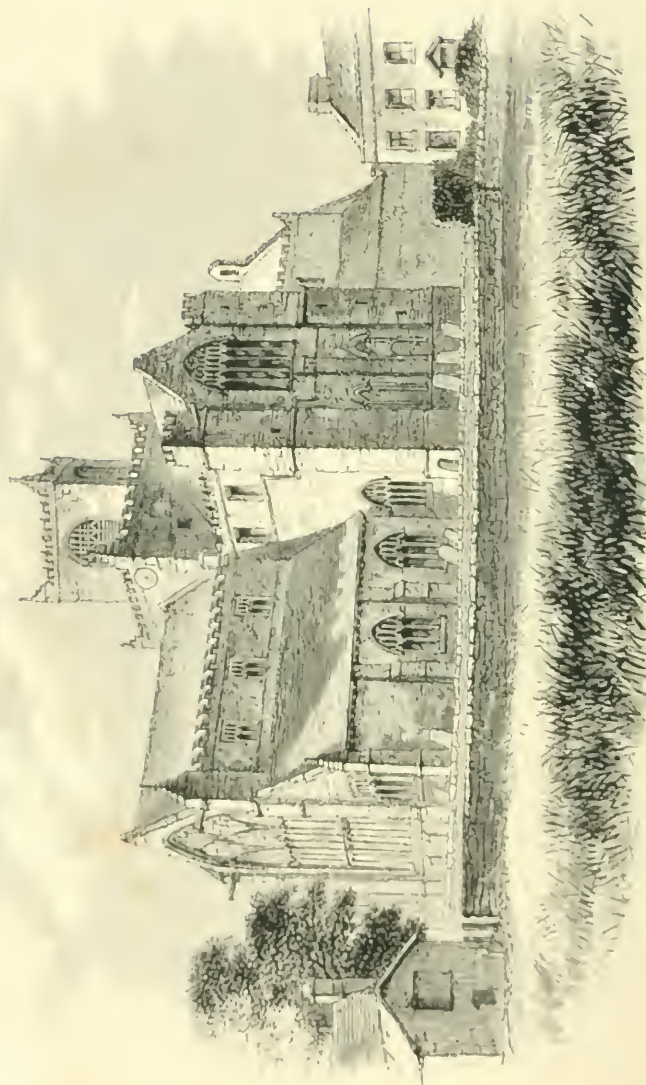
Announcement has been made of special meetings of the Ethnological Society during the following season. At the meeting on June 1, to take place at the Royal United Service Institution, Whitehall Yard, Mr. C. Spence Bate, F.R.S., will give a Report on the Prehistoric Antiquities of Dartmoor. On June 7, a discourse will be delivered at the Museum of Practical Geology, Jermyn Street, by the President, Prof. Huxley, LL.D., F.R.S., on the Geographical Distribution of the chief modifications of Mankind. On June 21, Mr. David Forbes, F.R.S., will discourse at the United Service Institution, on the Aymara Indians of Bolivia and Peru. The first volume of a new series of the Journal of the Society has recently been issued, containing amongst numerous subjects of Ethnological interest, a memoir by Col. Lane Fox, on Flint Implements from Oxfordshire and the Isle of Thanet; an account of Stone Implements from the Cape, by Sir John Lubbock, Bart.; and a valuable paper on Prehistoric Archaeology of India, by Col. Meadows Taylor. The Journal may be obtained, through any bookseller, from Messrs. Trübner, Paternoster Row.

It is with special satisfaction that we announce the completion of the "Guide to Prehistoric Archaeology, as illustrated by the Collection in the Blackmore Museum, Salisbury," and also the more compendious Synopsis for general Visitors. These works have been prepared with great care by the Hon. Curator, Mr. E. T. Stevens, in accordance with the request of the generous founder of the Collection. They were essential to the fulfilment of his purpose in supplying so important a means of public instruction, accessible, free of charge, during a great portion of each week. The first-mentioned volume (600 pages, 8vo., with numerous illustrations) comprises a mass of valuable information well combined and presented in a manner that will render it highly acceptable, not less as a manual of reference to those conversant with the science, than as a guide to the uninitiated student. The two publications to which we desire to invite special attention are to be obtained, in London from Messrs. Bell and Daldy, and from Messrs. Brown and Co. at Salisbury.

A "Compendious History of Sussex" is announced as in forward preparation by Mr. Mark Antony Lower, well known, amongst other literary labors, as a contributor to the Archaeological Collections produced by the local Society, formed in 1846 under the auspices of our lamented friend, Mr. Blaauw. The amount of topographical information, relating to the county, accumulated since the publication of the rare and costly volumes by Dallaway and Cartwright, and the general History of Sussex by Horsfield, is very great. The proposed contribution by Mr. Lower cannot fail to be extensively acceptable, especially as it will include an index of the first 20 volumes of the "Sussex Archaeological Collections," with which it will range, forming 2 vols. 8vo. Mr. Lower will thankfully receive any information addressed to him at Seaford.

In the report of the Annual Meeting at Bury St. Edmunds the remarks of the Rev. F. R. Chapman, then Vicar of St. James' Church (now Archdeacon of Sudbury), at the opening meeting (vol. xxvi. p. 368), are referred to on p. 393 as applying to the late restoration of that church. This, we are informed, is an error; they being intended only to have relation to the clergy generally.

CARTMEL PRIORY CHURCH, LANCASHIRE.



1 Cartmel Priory Church, Lancashire, North East View. From a drawing by the late Rev. John L. Pett, F.S.A.

The Archaeological Journal.

JUNE, 1870.

CARTMEL PRIORY CHURCH, LANCASHIRE.

By the late Rev. J. L. PETIT, M.A., F.S.A.

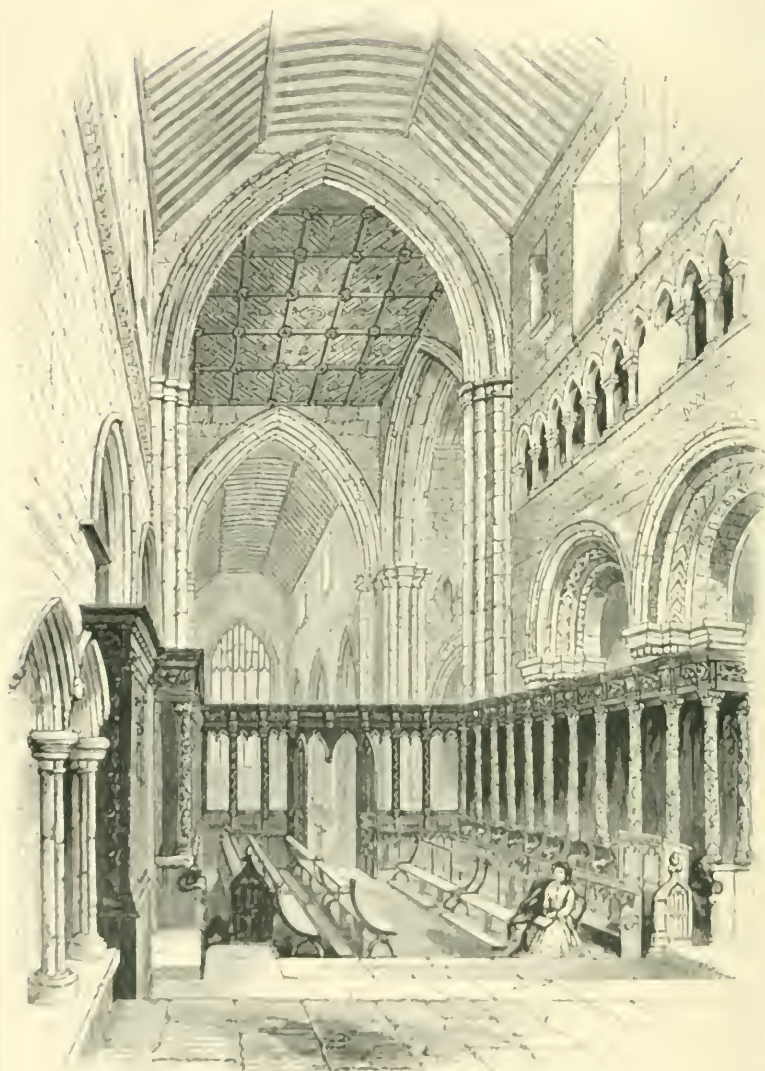
THE foundation of Cartmel or Kertmele Priory belongs to a period when the Norman style, which flourished in its purity half a century previously, was not yet extinct, but the rudiments of the succeeding Early English, or Early Pointed style, showed themselves very clearly. The priory, for canons regular of S. Augustin, was, according to Dugdale, founded by William Marshall the elder, Earl of Pembroke, in the year of our Lord 1188. I do not know if we can ascertain anything connected with the building beyond this fact, from records of the period. Its history is contained in its architectural character, which, throughout a great part of the structure, corresponds with the above date. Nearly the whole, however, of the nave and several important insertions belong to a later period of the Gothic style. The church has undergone an admirable restoration by Mr. Paley, which, unlike many restorations, assists instead of confusing or misleading the antiquary, bringing, as it does, to light features which had been hidden, with the help of no more additional work than was demanded by necessary repair. There is a very short account of the church at the end of Whitaker's History of the original Parish of Whalley; and a more detailed architectural notice by Mr. F. A. Paley, in the Guide to Grange; which latter, indeed, renders my present task almost unnecessary.

The structure, in its present condition, consists of a choir with aisles, transepts of a considerable length, a low central tower surmounted by a square lantern set upon it diagonally, and a nave with aisles, of a length not much exceeding the

choir ; indeed the whole plan does not differ much from the Greek cross. The whole length internally is about 157 feet ; that of the transepts, with the intersection, also internally, is about 107 feet. Whether the church was ever intended to follow the type of Benedictine and Cistercian abbeys of the period may be questioned ; in that case the nave would have been considerably longer, as at Tewkesbury, Buildwas, Römsey, and in most of the larger abbeys in Ireland. The eastern part, including the tower and transepts, presents in some degree the character of these. The first bay of the nave, or at least a part of it, must have been completed, as we infer from the doors which open into the aisles immediately adjoining the transepts, as also from the completion of the tower piers ; but it is not impossible that the work may have stopped here, enough having been built for monastic purposes, and not resumed till a larger parochial church was required.

It may be observed, that the choir has a large south aisle of the period when the flowing Decorated or curvilinear Gothic prevailed ; consequently much later than the choir and transepts, and much earlier than the nave. This was called the town choir, and was used as the parish church for a considerable time. It would, I think, hardly have been built for such a purpose, had a nave of sufficient size been in existence, which might have been so used, as in Sherborn Minster, Wymondham in Norfolk, and many other conventual or collegiate churches. I need not, however, remark, that this is a mere conjecture, which would be overthrown at once by the discovery of 12th century work westward of the part in question. Part of the north wall is slightly thickened, though not to its whole height. Such a structure as the choir and transepts must have been the work of several years ; enough to have witnessed, at that particular time, much change of style. And we know that styles are not generally changed as it were in a moment, but, at the time of their transition, present many perplexing alternations. Sometimes we see the old style lingering on beyond the time at which we should have expected its utter disappearance ; while, in the same building, characteristics of the new style develop themselves very early, and in a manner precede their own recognized date. The tower piers of Cartmel Church might be pronounced almost pure,

CARTMEL PRIORY CHURCH LANCASHIRE.



II.—The Choir and Nave, view from the East end.

From a drawing by the late Rev. JOHN L. PUGH, F.S.A.

though late, Norman ; the arches which spring from them are pointed, and by no means obtusely ; and, though simple in their moulding, have the character of rather advanced work. There seems, however, no reason to suppose they are later, by a greater interval than that necessary for the settlement of the substructure. In these piers, the square abacus is used in the capital, and also in the triforium of the choir, which consists of a pointed arcade on shafts. I do not know to what extent it has been necessary to reconstruct this arcade, which before its restoration was built up in the wall ; but I have no doubt that its important features have been carefully retained. The arches between the choir and its aisles are round, and might be called either late Norman, or transitional. It is likely that they are among the earliest parts of the structure. The aisles, as they appear at present, are of the full length of the choir, extending to the east end, but originally they were shorter by a bay, the south aisle having been reconstructed in the 14th century and enlarged in both directions, so as to form a sufficient parish church, as we have already observed, and the north aisle being lengthened by the addition of a vestry of much later date.

The eastern compartment of the choir, therefore, stood clear of any aisle, as we often see in later parish churches, where the chancel has an aisle or chapel on each side, not extending in length to the east end. I do not think that this arrangement is quite so common in large conventual buildings as the simple choir connected with the eastern aisle of the transept, or divided from its recessed chapels by an unpierced wall ; or else an aisle carried the full length of the choir, or even round the east end, as at Sherborne Minster, Romsey, and Abbey Dore, in Herefordshire. It would not, however, be difficult to find examples of the arrangement which existed at Cartmel. Christchurch Cathedral, Oxford, is an instance, and, if I remember, Lanercost Abbey church has something of the same plan.

The side windows in what was the clear part of the choir still remain, though blocked up and mutilated. They are simple lancets, with a string or torus carried continuously round the edge of the jamb. Such would, I think, be seen in continental windows up to a late period ; and there is no reason why such windows should not be called good Early

English. The sedilia, now mutilated to give room to a fine decorated monument, must have been inserted. They appear to belong to some part of the 13th century, nearer its end than its beginning. I was shown the remains of a niche, perhaps a piscina, which has very recently been uncovered ; it is clearly of a transitional or very Early English character, having a sort of nail-head ornament, which appears in the adjacent pier arches.

I have said that it is likely the piers and arches of the choir are among the earliest parts of the structure ; but I believe this is more to be inferred from the general usage of church builders, who naturally began with the choir, as the most essential part of the church, than from their architectural character. The use of the round arch says positively nothing. Many good early English buildings in the north of England have occasional round arches. They occur in parts of Beverley Minster, which has nothing approaching to Norman or transitional about it. During the transitional period the round and pointed arches were evidently used indiscriminately, and very often, as if from a spirit of contradiction ; the details of the pointed arch are more purely Norman, while those of the round arch have mouldings and ornaments much resembling those of an advanced Gothic. In the pointed arch between the north transept and the choir aisle we find the chevron or zigzag, not exactly used in the same manner as in pure Norman work, but still with an evident intention of retaining the old forms. The choir arches have an elaborate series of mouldings and enrichments in those orders which face towards the choir itself, though the orders towards the aisle are very plain. The capitals exhibit some of those peculiar volutes that Mr. Sharpe pointed out to us at Selby, during the meeting at Hull, as sure marks of transitional work ; and there is a bold but somewhat fragile ornament which seems to have succeeded the chevron, and is not found at either an earlier or a later period than the transitional. It consists of two slender cylinders joined at a very acute angle, and standing free. We see it in Lichfield Cathedral in a pointed arch between the north transept and the choir aisle. Other ornaments in these round arches indicate rather an advance than a falling back on the old style. The abacus, instead of being square, is chamfered off at the angles. The bases are nearly pure Early English, though resting on a rect-

CARTMEL PRIORY CHURCH, LANCASHIRE.



IV. Pier, East end of North Choir Aisle.

From a drawing by the late Rev. John L. Petit, F.S.A.

angular plinth. The claw or leaf resting upon the angles of the square plinth, which is almost universal in early transitional pier bases, does not appear, and the Early English water-moulding, namely, that peculiar hollow which is noticed by Rickman as the only Gothic moulding that does not throw off the water, is perfectly worked out in the tower piers as well as those of the choir.

The rule laid down by Mr. Sharpe that the pointed form was used for arches of construction, while the semicircular form was retained in arches of decoration, applies, I should say, to the earlier and severer, rather than the later stages of the transition. In Buildwas Abbey, perhaps one of the earliest as well as purest specimens, the rule, so far as we can judge from the present remains, seems to have been observed most strictly. The same may be said of Kirkstall, where the constructive arches are still more decidedly pointed than at Buildwas; but, if I remember, the original work contains no pointed doors or windows, and their Norman characteristics are well preserved. The round constructive arches at Selby are, as Mr. Sharpe has observed, accounted for by the expediency of adaptation; but there the style was sufficiently advanced to show itself in a rich display of shafted lancet windows. Here, above the round constructive arches of the choir, we have a Decorated pointed arcade, namely, the triforium, laid open in the late excellent restoration. In this the capitals of the shafts retain the square abacus, as does the external clerestory arcade of Romsey church.

The insertions of a later period make it difficult to ascertain to what extent the round arch was used in windows. There are some remains of round arches in the south transept, but apparently the pointed work in the transepts is quite as early, perhaps earlier, than the round. In the front of the north transept are two very well proportioned lancet windows (now blocked up), with shafts having the square abacus. But one of these windows is broken up by the insertion of a round-headed opening of manifestly later date, which it is not easy to explain or account for. Its mouldings are numerous and elaborate, and the abacus from which they spring, instead of being square, is adapted to their arrangement. The south aisle of the nave, close to the transept, has a fine enriched round-headed door, but with a decidedly early English arrangement of shafts.

The elevation of the transepts is so completely Norman in its character, that I am inclined to think it is almost wholly unaltered, in its general outline, except by the embattled parapet. This will be seen, if we compare it with Romsey Church, whose transepts are purely Norman. I cannot perceive much difference between the masonry above and below the string on which the upper stage rests, looking at the building externally, but internally the stones resting on the string are rather larger than those immediately below ; but this is perhaps no more than might be expected where a new level is obtained by a bonding course. The windows in the upper story are perfectly plain, with square heads. The first time I ever saw this church, which is now a great many years ago, it struck me that these same square-headed windows had a decided air of originality. I may have been deceived, but I have seen nothing as yet to convince me that I was. Those in the north transept are of arched construction, and very slightly segmental. One at least of those in the south transept has a regular lintel, and is perfectly flat. The north transept is divided by a vertical buttress, as at Romsey. It probably had lancet windows above those now remaining. The south transept has not the central buttress. The introduction of Perpendicular work makes it difficult to trace the probable design. In the east side of the north transept is a very depressed arch, with banded shafts and square abacus. It now contains a perpendicular window. I think there must formerly have been a complet.

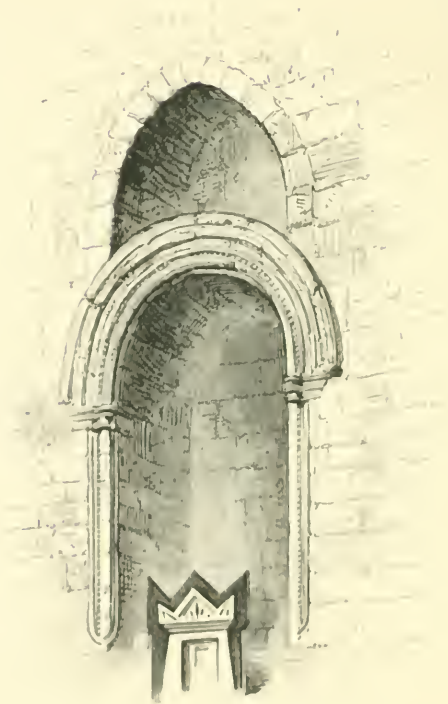
The lower part of the central tower probably belongs to the twelfth century, or a sufficiently early part of the thirteenth to be considered as appertaining to the first design. It is very low and massive, and without ornament, but evidently of very strong construction, with thick walls. Its embattled parapet is a late addition. The windows are small square-headed openings. This tower may have formed a lantern to the interior, but there is no enrichment to make us sure that it ever did so. It is indeed almost impossible to pronounce, in the earlier portions of this church, what belongs to the original design, where that design has been altered or modified in the course of erection, where work has been destroyed and replaced at a very early period for the sake of conformity with the style as it gradually deve-

CARTMEL PRIORY CHURCH, LANCASHIRE.



V — Arch between the Transept and the Choir Aisle.

From a drawing by the late Rev. John L. Petit, F.S.A.



VIII. Circular arched Tomb and portal Arch in the North Transept.

From a drawing by the late Rev. John L. Pott, F.S.A.

loped, and even where alterations have been made of a much later date.

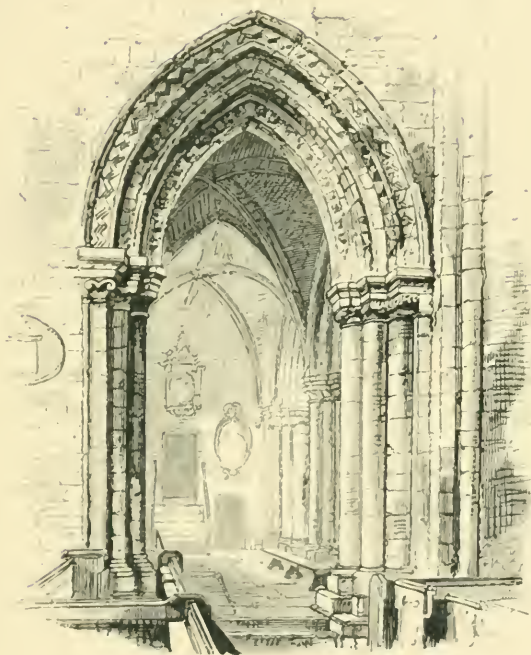
The capricious employment of the round and pointed arch is one of the remarkable features of this church. If we stand in the area of the tower and look westward so as to obtain an elevation of the west wall, internally, of the north and south transepts, we see near the southern extremity a round-headed window, which corresponds in position with a pointed window in the north transept. Again, over the arch into the south aisle of the nave is a pointed arch, which is answered by a round arch over the arch into the north aisle. A round arch in the eastern side of the north transept corresponds with a pointed arch in a similar position in the south transept. All these must be of much the same date; on any other supposition it would be impossible to trace the progress of the building. The engaged pier, from which the easternmost choir arch springs, presents a peculiarity, namely, a small shaft connected with the pier by a concave moulding, the section of which is a flowing curve having a point of contrary flexure. I was not aware that such were found in work of a date much earlier than that of the Decorated style, the mouldings of piers up to that time being curves of one continuous curvature, any of an opposite being separated by a break instead of falling in with a contrary flexure. I take it that the exceptions to this rule are rare, but this must be one, as the capital is very decidedly transitional. Mr. Sharpe informs me that he is acquainted with several instances, but where they occur I cannot help thinking that they show an advancement of style. It is a feature that might easily escape notice from a cursory observer, as within the hollow of the moulding we should not detect at first whether the line was one having a contrary flexure, or one consisting of two continuous curves separated by a break.

There is another peculiarity to which I would more especially direct attention, as it appears to raise a doubt whether a fully developed nave ever existed or was even ever designed. You are well aware that when ornament was sparingly used it was generally so arranged as to be seen in the greatest quantity by the spectator entering by the west door and looking eastward, that is, the faces looking to the westward were generally more enriched than the

eastern ones ; and the transept arches, and all running longitudinally from east to west, were more enriched on the faces presented to the central area, whether of nave, tower area, or choir, than of those turned away from them, so as to be seen in perspective by the spectator looking towards the east end of the church. Now, in the present case, the ornament is so arranged as to be in sight of the spectator standing within the tower area and looking either east or west. The ornaments on the arches between the transepts and the choir aisles are on the western faces, the eastern ones having only three plain chamfered orders, without any label or hood-mould. The choir arches are also enriched on the faces looking towards the choir, those facing the aisles having three plain chamfered orders without label. The north and south tower arches are also enriched with mouldings in the direction of the central area, but in the other direction have the three plain chamfered orders. Thus much is in accordance with the usual rule ; but when we look to the western sides of the tower and transepts, we find the arrangement reversed. The arches into the nave aisles have their eastern faces enriched, while the western ones have only the three simple chamfered orders, and the great tower arch, though it has mouldings on its west face, is rather richer on its eastern face, so that this arch also shows a greater amount of ornament to the spectator in the tower area looking westward, than to any one looking eastward from the nave. The proof is, I think, presumptive, though not altogether conclusive against the existence or even the intention of a nave extending beyond a single bay. The next portion, in point of date, is the south aisle of the choir ; and this is a beautiful specimen of the late Decorated style, when the geometrical tracery, which in England lasted a very short time, had given way to the flowing or curvilinear. The windows are of good composition, and exhibit much variety ; and the Harrington monument, which occupies an opening made for the purpose in the wall between the choir and the easternmost bay of the aisle, is a work of great richness and beauty. It has two recumbent figures surrounded by a range of smaller figures, now mutilated ; and it occupies a rich shrine or chapel divided into two compartments by a shaft and arches in each face of the wall.

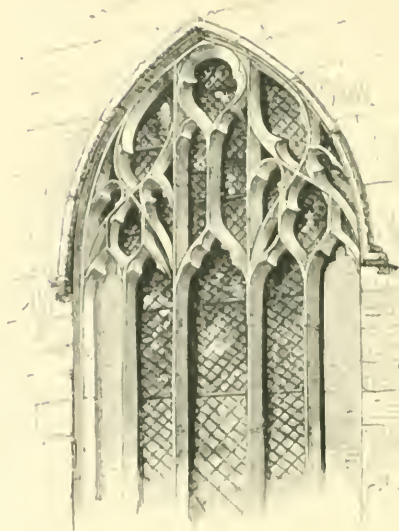
The Perpendicular or rectilinear work that appears in the

CARTMEL PRIORY CHURCH, LANCASHIRE.



VI.—Arch in the North Transept, looking East.

From a drawing by the late Rev John L. Petit, F.S.A.



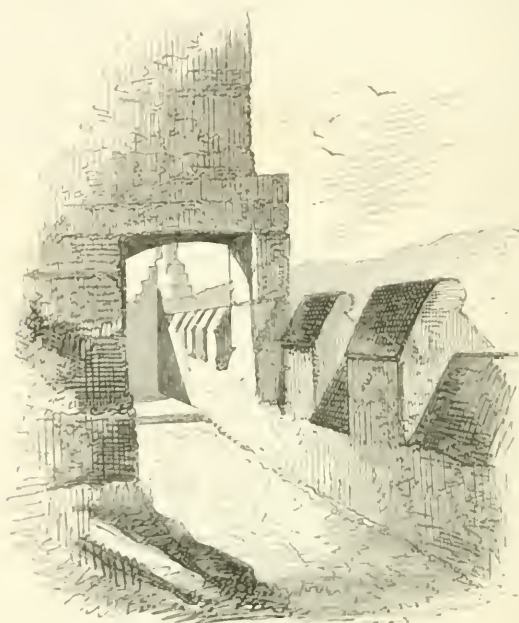
VII. Window in the South Aisle of the Choir.

From a drawing by the late Rev. John I. Pettit, F.S.A.

building is mostly of a late character, belonging, I should say, to the latter half of the fifteenth century, or even to the sixteenth. The whole of the nave is of this style. As we have observed, it is rather problematical whether any Norman or transitional nave preceded it; but both the line of the piers and that of the outer walls correspond with those which the original building would have presented, if we are to judge from the portions adjoining the transepts. The north wall of the nave aisle nearly corresponds with that of the choir aisle. The general plan of this nave is admirably adapted for a parish church, being very wide, and having piers which occupy little room and do not interfere much with the view of the whole. The plan, including the aisles, is nearly square. No part of it is vaulted, the only vaulted part of the church being the north aisle of the choir, though the corresponding aisle of the choir, and also the aisles of such portion of the nave as was built in the Transitional period, were vaulted. The timber roofs are very plain, the only enriched part being the square of the intersection. The west end, though very simple and devoid of ornament, is rather a fine composition, perhaps on that account. The depth of the buttresses, and a small bell-niche over the gable, give it much character.

The east window is a very large and fine one of nine lights, divided by a transom, and with good tracery in the head. The breadth of the whole is divided into three compartments by mullions of the first order, which branch off into curved lines intersecting each other, and falling into the archivolt. I think that these branches are of the full depth of the principal mullions, but not equally thick. It is not always easy to detect these variations. These compartments are again subdivided into three lights by mullions of an inferior order; while those in the head are still slighter than the last. Though there may be no particular merit in the composition or details of this window, still its great size, its excellent proportions, and its richness, resulting from the great number of its subdivisions, give it a grandeur and beauty which we may not recognize at first sight in windows of a much more artistic design. There are remains of good painted glass in the east window, which are preserved *in situ*. I should have remarked, that there are also remains of Decorated glass in the south aisle of the choir. Both the

transept fronts have good Perpendicular windows, though with no very peculiar features; the same may be said of those inserted in the north aisle of the choir, which are of a more vigorous character. The clerestory windows have square heads, and have mostly two foliated lights, in some cases subdivided into tracery at the top. There is some excellent late wood work in the choir.



IX.—Embattled Parapet; tower of Cartmel Priory Church.

But the principal Perpendicular feature—one which distinguishes this church, I suppose, from every other in the kingdom, is the upper stage of the tower. This is a low square tower, set diagonally upon its more massive substructure; its angles resting upon the central point of each side. To give a free passage round, within the parapet of the lower tower, the angle of the upper tower is supported by a shaft or pier, apparently insufficient for the weight above, leaving a square-headed door, or opening. I suppose that the angles of this tower are supported more by their cohesion with the mass than by these very slight pillars; still the construction appears somewhat audacious. The effect of this structure being so

CARTMEL PRIORY CHURCH. LANCASHIRE.



III. — The Central Tower.

From a drawing by the late Rev. John L. Petit, F.S.A.

uncommon, it will be judged differently, according to the taste of the spectator. For my own part, I think it extremely pleasing and satisfactory, and cannot see how the proportions could have been improved. I am not acquainted with any similar specimen in England. I have seen one in France, namely, at Rheims, but its effect is not nearly so fine. I did not examine its construction. On the whole, the church that we have been considering deserves very careful attention, as being a good and somewhat perplexing example of Gothic architecture in its most interesting phase, as exhibiting much grandeur in its composition, and as presenting an outline that is altogether unique. And every lover of mediæval art ought to feel thankful to the architect to whom we are indebted for so careful and successful a restoration.

The Central Committee desire to record the special tribute of grateful remembrance of the constant generosity evinced by the deeply regretted Author of the foregoing memoir. By his kindness, during the last quarter of a century, the Journal of the Institute has, on many occasions, been enriched. The Members of the Society will not fail to recall with gratification the numerous illustrations presented from time to time by Mr. Petit,—reproductions of the tasteful works of his spirited pencil. These artistic embellishments, it may be remembered, commenced in the first volume of this Journal; they have been continued without intermission in that work, and also in the Annual Transactions of the Institute.

The Committee gladly avail themselves also of the occasion to express their high sense of the kindly consideration of his sisters and executors, who have now given effect to the liberal intentions of their lamented Friend, in regard to this, the latest mark of his cordial encouragement of the Institute.

NOTE ON A HOARD OF ANCIENT BRITISH COINS FOUND AT
SANTON DOWNHAM, SUFFOLK.¹

By JOHN EVANS, Esq., F.R.S., F.S.A., F.G.S.

A FEW months ago, some labourers engaged in digging gravel in the parish of Santon Downham, near Brandon, and a little to the south of the Little Ouse, which forms the boundary between the counties of Norfolk and Suffolk, came upon a small hoard of coins, which passed into the possession of the Rev. W. Weller Poley, the incumbent of the parish, who has kindly placed them in my hands for examination.

They are, with but two exceptions, coins of the class usually attributed to the ancient British tribe of the Iceni; and, as is usually the case, composed of silver, to a considerable extent alloyed with copper, as is testified by the green coating with which the greater part of the surface of most of them is covered.

Within a few yards of the coins were found some fragments of pottery, which, though probably belonging to the same period, were not immediately connected with the hoard. These fragments are not sufficiently large to show with certainty the form of the vessels of which they were component parts. There seems, however, to be portions of two circular vessels of different sizes, with flat bottoms and nearly upright sides, hand-made, and not turned on a potter's wheel. The larger may possibly have been as much as 8 or 10 inches in diameter, and the smaller probably 5 or 6 inches. The surface of the former appears to have been in part ornamented by rows formed of short straight indentations, arranged in pairs, placed at a slight angle to each other, like the pairs of leaves in a laurel wreath. The smaller vessel has had

¹ This memoir was communicated to the Section of Antiquities, at the Annual Meeting of the Institute at Bury St. Edmund's, in July last, as stated in the Report of the Proceedings, Arch. Journ., vol. xxvi. p. 352. It was a cause of

regret that want of time, in the author's absence, prevented the full reading of a paper of so much interest. It has subsequently appeared in the Journal of the Numismatic Society, and is here reproduced by the author's kind permission.

towards its top five parallel circles, deeply incised into the clay, at intervals of about a quarter of an inch, so as to form, as it were, a series of hoops round the vessel, the first and third of which, below the rounded rim, have been decorated by a dotted series of depressions dug into the clay with a pointed instrument. The clay itself is comparatively free from stony particles, and has been but imperfectly burnt.

The coins are 109 in number, and may be classed as follows, the references being to my "Coins of the Ancient Britons :"—

COINS READING ECEN :—

As Pl. XV., No. 1	8
With three pellets on shoulder of horse, as Pl. XV., No. 2	4
	—12

COINS READING ECE :—

With full-faced horse, as Pl. XV., No. 3	11
Many of these are imperfectly struck, one in fair state appears not to have the trefoil on the shoulder.	
With the bifurcated legs to horse, as Pl. XV., No. 4	3
With six pellets on the shoulder, as Pl. XV., No. 5	5
	—19

COINS READING AESV :—

As Pl. XV., No. 8 (two doubtful as to reading)	4
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COINS READING ANTED, IN MONOGRAM :—

As Pl. XV., No. 11	10
As Pl. XV., No. 12	2
As Pl. XV., No. 13	1
Small unpublished coin	1
	—14
Coins of the type Pl. XV., No. 1 to 13, but not showing their legends	29

UNINSCRIBED COINS :—

Pl. XVI., No. 7 and 8	26
„ No. 9	2
„ No. 10	1
	—29

ROMAN COINS	2
	—
	109

These latter are second-brass coins (*dupondii*) of the Emperor Claudius—one with the reverse of LIBERTAS AVGVSTA, the other with that of Pallas standing (Cohen, No. 79 and 87), and both probably struck in A.D. 41.

The general similarity in the character of this hoard to that

of the larger deposit found at Weston, near Attlebridge, Norfolk, and described by Mr. C. Roach Smith in the *Numismatic Chronicle*, vol. xv. p. 98, is at once apparent. There are, however, wanting two or three of the Weston types, both inscribed and uninscribed, in the Santon Downham find; but, on the other hand, the latter presents us with at least one unpublished variety, which I will proceed to describe before entering into any farther considerations as to the date to be assigned to the deposit.

This coin, like the small specimen in the Hunter Collection, reading² ECEN, and like a few uninscribed coins, appears to have been intended to pass current for half the value of the larger pieces, its weight being only $7\frac{1}{2}$ grs., the average weight of the others comprised in the hoard being 19·2 grs. The regularity in the weight of these coins is worthy of notice. Without weighing each coin separately, I have taken the aggregate weights of the coins of each variety, so as to obtain the average weights of the coins of each kind, and the greatest variation is only from $18\frac{1}{4}$ to $19\frac{1}{2}$ grs., with the exception of the three uninscribed coins last described, which weigh but $17\frac{1}{2}$ grs. each. It is possible that these may have been longer in circulation than the others, but there is little either in the weight or the degree of wear to justify me in attempting any chronological arrangement of the types. It appears probable that among the Iceni, as well as in the western part of Britain, there was a contemporary issue of inscribed and uninscribed coins.

The type of the small coin which has led to this digression, and of which a woodcut accompanies this notice, may be thus described :—



Obv.—Lozenge-shaped ornament with incurved sides, formed of a sort of cable moulding; within it, in the centre, two hollow crescents, back to back; above and below them a small annulet; in front of each a small pellet within the lozenge, and one on either side beyond it in front of the horns of the crescents.

Rev.—ANTED in monogram, linked to the hind leg of a horse with

² *British Coins*, 355.

long ears, curvetting to the right; above, a V-shaped figure like a stag's head caboshed, with a pellet on either side of the head and between the horns; a pellet beneath the tail and below the body of the horse, which has a sort of bridle formed by an arc of pellets. $\text{AR } 7\frac{1}{2}$ grs.

To those unacquainted with the ancient British series of coins, the derivation of the type of the obverse from the laureate head of Apollo on the gold staters of Philip II. of Macedon would appear not a little problematical. But on the larger inscribed Icenian coins it will be observed that there are wreath-like ornaments extending from the fronts of the two crescents placed back to back in the centre, as far as to the edge of the coins, and their connection with the wreath on the earlier coins is beyond all doubt. The two crescents in the centre are also derived from some of the earlier modifications of the Philippus, and are, in fact, the features which became most permanent on the coins of the Iceni. To those accustomed to the singular alterations in character which the type, as originally imported, underwent at the hands of successive generations of British moneyers, the two crescents in the centre of the lozenge afford ample evidence of the type being merely one of the degenerate derivatives from the laureate head. It is, moreover, allied in character to that of some of the gold coins of the same district, such as Evans, Pl. XIV., 10 to 14. A somewhat similar lozenge-shaped device occurs on some of the small copper coins of Verulam; but in that case the central crescents are absent, and its relation to the Macedonian prototype extremely doubtful.

The type of the reverse is much the same as that of the larger coins, with the same legend; but the horse is more spirited, and in better drawing, though by no means a fine work of art. The object above its back has much the appearance of having been intended to represent the head of a stag, which in that case is now for the first time found upon a British coin. It will be remembered that heads of oxen are frequently represented in the same position as this relatively to the horse, on the gold coins of Tasciovanus, Andocomius, and other princes. The monogram ANTED, though not visible in its entirety, appears to be of precisely the same character as on the larger coins.

I have already elsewhere suggested the probability of this

being an abbreviated form of ANTEDRIGVS, and that the prince who bore this name, and who ruled in the eastern part of Britain, may have been the same who, subsequently to the defeat of the Iceni by Ostorius in A.D. 50, became a chieftain in the western district, and of whom numerous coins, both in gold and silver, occurred in the hoard discovered some years ago at Nunney, near Frome, and described by me in the *Numismatic Chronicle*.³

Since writing this paragraph, I have met with a gold coin of Antedrigus, slightly differing in character from any before known, which seems to afford some additional evidence of the original connection of this prince with the Iceni. The obverse presents the ordinary type of his gold coins, the branch-like ornament, but rather larger and broader than usual. The reverse has also much the same general appearance as usual, but the horse approximates in character more closely to that on the coins inscribed BODVOC than to that on the ordinary coins of Antedrigus; the wheel below is larger; in front of the horse is a ring ornament, and behind him another, but formed with a beaded circle. There are no traces whatever of the letters RIGV which usually occur below and around the horse, and the letters NTE of the ANTED inscribed above it are linked into a monogram in a similar manner to that employed on the Icenian silver coins, the monogram on which, however, also includes the A. When we remember that on no other coin of the western district are there any letters linked together, nor any attempt at a monogram, the fact of the letters on a gold coin of Antedrigus being thus linked together, becomes highly significant.

It is worthy of remark that with the Nunney hoard also there occurred several Roman coins, and among them a second-brass coin of Claudius; and, as in that instance, as well as in the case of the Santon Downham hoard, these coins have evidently been a considerable time in circulation, the date of both deposits must be fixed some years later than A.D. 41, the year in which the coins of Claudius were probably struck.

I have elsewhere suggested the period of the wars with the Romans A.D. 50 to 55, when Ostorius Scapula was Propraetor in Briton, as being probably that of the deposit of the Nunney hoard, and it seems as if that of Santon Down-

³ *New Series*, vol. i. p. 1.

ham might with propriety be assigned to much the same date. There can be little doubt that all the silver coins comprised in it, though varying in type, were struck for circulation among the powerful tribe of the Icenii, who at some time between A.D. 43 and 50 had entered into alliance with the Romans. In the latter year, however, they came into collision with the invaders, and were defeated by Ostorius, after which time, though they retained the kingly form of government, it would seem to have been only on sufferance by the Romans, and I was formerly inclined to think that with their defeat the native coinage ceased. The occurrence of these worn coins of Claudius in association with Icenian coins is by no means inconsistent with such a cessation of the native mints in A.D. 50, as the amount of wear they exhibit is not more than might be the result of constant circulation for eight or ten years.

Still, it is impossible to say with certainty that the Icenian coinage ceased before the final subjugation of the tribe by the Romans in A.D. 61, though for the last ten years of their existence their chief, or *regulus*, was probably a mere creature of the Romans.

For how long a period Prasutagus, the husband of Boadicea, was king of the Icenii, we have no means of knowing, but at present no coins have been found which can with any show of reason be assigned to him, and this circumstance alone affords some grounds of presumption that the native coinage had ceased at the time of his accession.

Were there any room for supposing that his name is incorrectly given by Tacitus, and that the initial P and R are in excess, the coins reading AESV might well be assigned to Asutagus, and certainly, from the condition of two of the specimens, they would seem to have been among the latest struck of the whole. A coin of the same type occurred in the Weston find, where the Roman coins were of silver, and none of them imperial. They were, however, so much worn that possibly the date of the deposit may have been much the same as in this case. A notice of two other hoards of the same character found at March in Cambridgeshire, and at Battle in Sussex, will be found in the *Numismatic Chronicle*,⁴ and other details respecting the Icenian coinage will be found in the book already cited.

⁴ Vol. i. p. 59.

ON A ROMAN LANN FOUND AT WELNEY, NORFOLK.

By S. S. LEWIS, Fellow and Librarian of Corpus Christi College, Cambridge.

HAVING in the course of last Christmas vacation spent a few days in the fen country lying between Ely and Huntingdon, I was much surprised at the variety of interesting questions suggested on the most cursory survey of what is described in county histories as a dreary and uninteresting plain. Year by year the ploughman brings again to light huge trunks of sound but blackened oak ; acorns and hazelnuts, as of last year's growth ; horns of red deer, perfect as when shed by the monarchs of the woodland, who shall say how many centuries ago ?—objects these that tell of a primeval forest age which must have been succeeded by alternations of submergence and states of rank, swampy vegetation, for in many parts horizontal seams of alluvial soil are found dividing deep layers of peat. The progress of agriculture having by arterial drainage made fertile, for corn and grass, spots formerly little visited except for the flocks of wild fowl to be shot, or the curious butterflies to be caught, we are able at last to begin our conjectures as to the mode of life of the—may I say—antediluvian inhabitants of this fen country, on which in later times the old Roman castle of *Camboritum* looked down as a peninsula on a number of islets.

In order at once to consolidate and manure the upper stratum of peat, which years of drainage have reduced to less than half its original thickness (within forty years a subsidence from 9 to 4 ft. in depth has been observed), the farmer every eight or ten years spreads on the surface, and

¹ This remarkable vestige of Roman occupation of the Fens of Cambridgeshire and adjacent counties was exhibited, through the friendly intervention of the author of this memoir, by Mr. Goodman, on whose property it was found, at the Monthly Meeting of the Institute, on December 3, ult. See Proceedings at the

Meeting, *infra*. It was subsequently submitted to the Society of Antiquaries, and also to the Cambridge Philosophical Society. On the last mentioned occasion the memoir, here reproduced by the obliging permission of the author, was read.

ploughs in, a layer of stiff clay brought up by means of trenches 3 ft. wide at intervals of about 15 yards. Rarely are these clay-pits opened without disclosing not only the vegetable and animal traces of ages past, which I have mentioned, but also implements of flint, bronze, and iron, which admit of close comparison with those already classified by the laborious skill of Dr. Keller, Sir John Lubbock, and other pre-historic archaeologists. Nor are clear evidences of Roman occupation wanting, not only as elsewhere in bulwarks against a common enemy, the ocean (*e. g.* at Lynn), and in roads (*e. g.* that from Denver through March to Peterborough), but again and again, as an elevation of a few feet above the surrounding fen finds us on what is still an island, speaking for itself in such names as Ston-ey, Angles-ey, &c., we discover that never-failing evidence of Roman habitation, pottery, as well as arms and domestic appliances for use and luxury.

It is an object of the last class that, by the favor of the owner, Mr. Albert Goodman, was recently submitted to the examination of the Archaeological Institute,—a charger, which, for reasons that may prove satisfactory, I think must be considered as of Roman work. It was found in the spring of 1864, at the depth of 14 inches, in the course of gault-ploughing a piece of old grass land, about 200 yards from the Hundred Feet River at Welney, once an islet in the district of Wella which now comprises the parishes of Upwell, Outwell, and Feltwell, in the county of Norfolk.

Various opinions have been suggested in regard to the original intentions or use of the large disk of metal thus brought to light; there can, however, be little doubt that it is a specimen of the flat charger or dish used by the Romans to hold a large joint of meat, or, as in a case mentioned by Horace,² (illustrated and confirmed by an ancient fresco found near S. John Lateran at Rome,) a boar entire, and also serving occasionally for sacrificial rites.³ Such an appliance of the table was properly designated a *lanx*, and the epithets, "panda," "cava," and "rotunda," commonly applied to it by ancient writers, are obviously most appropriate. To the kindness of Professor Liveing I owe an analysis, which shows that the metal of this *lanx* is 80 per cent. tin, with $18\frac{1}{2}$ lead, and a little trace of iron, thus nearly corresponding with the *argen-*

² Sat., lib. ii. 4, v. 41.

³ Virg. Georg., lib. ii. v. 194, &c.

tarium of Pliny,⁴ and with certain oval cakes that have been found in the bed of the Thames, near Battersea, on which are stamped the Christian monogram, with the word "*spes*" and the name, as it is believed, of Syagrius, perhaps the same of whom we hear as secretary to the Emperor Valentinian.⁵ One of these cakes weighs nearly 111 ounces.

In the term *ἐὰνὸς κασσίτερος*, as designating the material of which Hephaestus made the greaves of Achilles,⁶ we probably find the earliest mention of a compound of this kind; and Boeckh⁷ gives *καττιτέρα ἐνώδια* (? *ἐλλόβια*) *πέντε* as occurring in a list of offerings of plate and jewelry dedicated, in Olymp. 95, 3 (B.C. 398), to the gods of Athens. The pliability of such metal may be hinted at in the words of Juvenal:⁸—

Aspice quam magno distendat pectore lanceam
Quae fertur domino squilla

as is seen also in the passage from Horace quoted above.

Of the *lanc* before us the diameter is 2 ft. $4\frac{3}{4}$ in., equal to $2\frac{1}{2}$ ft. of Roman measure, the weight 30 lbs.—excessive, according to our modern ideas of the capabilities of servants; but Pliny⁹ tells of a Spanish *dispensator* (one of the slaves of the Emperor Claudius) who had a *lanc* of 500 lbs. weight, and eight more of upwards of 100 lbs. each, to make a complete service, if such be the true meaning of "*Comites ejus octo octingentarum et quinquaginta librarum*," and naïvely adds, "*Queso quam multi eas conservi ejus inferrent aut quibus cenantibus*." Tertullian, alluding to the passage, calls such a dish "*promulsis*," meaning, I suppose, "*promulsidarium*." In the centre, on the upper surface, which is slightly dished to prevent the gravy flowing over, there is a circular compartment, nearly 9 inches in diameter, encircled with a very elaborate diapered pattern of peculiar type, produced apparently by means of the punch, chisel and hammer: this compartment, of which the beautiful design is somewhat indistinct in the present condition of the surface, is surrounded by a bordure, decorated with trailing or branched work, in the outer circle of which may be discerned, in ten

⁴ Pliny, Hist. Nat., lib. xxxiv. c. 20 and 47.

⁵ Proceedings, Soc. Antiq. second series, vol. ii. p. 47; vol. iv. p. 351.

⁶ *H.* xviii. 612.

⁷ *Inscr.* i. 150, § 18.

⁸ V. 80.

⁹ Pliny, Hist. Nat., lib. xxxiii. c. 52.

spaces, at equal intervals, certain letters, which my friend, Mr. Albert Way (who has materially aided me in the present investigation), thinks may form the words VTERE¹ FELIX ; I cannot, however, state more in support of this view than that there is certainly a V and an X, with eight intersecting arcs between them, and that in several of the intersections the letter E may be distinguished. Padre Garrucci, however, and Henzen, two of our highest authorities in this branch of archaeology, insist that there are sufficient proofs of the reading VTERE FELIX, and that the letters cannot be otherwise explained. Of these some appear to be deeply incised, while others are embossed in slight relief. On the reverse of the *lanx* there is a central circle in relief, possibly thus fashioned to give more substantial support, and to prevent the risk of bending or falling out of shape that might occur in so large a flat plate of metal, when a heavy joint of meat was carried upon it. As to how our relic reached the position in which it was recently found, whether by the upsetting of a boat or otherwise, only the vaguest conjectures can be formed ; but, from the comparatively slight depth in the peat at which so heavy a vessel lay, we may perhaps infer that the submergence of the fen country had taken place at a period already remote, when the Romans first planted their garrisons in Britain.

Although few examples of the *lanx* are to be found in collections of Roman utensils, they have occasionally occurred. A large plain *lanx* of silver, of circular form (diameter 17 $\frac{7}{8}$ inches), is to be seen in the jewel-room at the British Museum.² In Lysons' *Reliquiæ Britannico-Romanæ*, vol. i., we find one figured similar in style and material, as compared with that obtained at Welney, but inferior in size and quality of decoration, which was found near Manchester on the site

¹ This kindly aspiration (which may be compared with Macbeth's—

“Now good digestion wait on appetite,
And health on both!”)

is read on an amulet figured by Spon (*Misc.* 297, 11); on a silver spoon found at Augst (the ancient Augusta Rauracorum) near Basle (Or. *Inscr.* i. 428); on a bronze patera figured by Buonarroti (*Med. Ant. post. T.* 37); and on a silver votive dish found at Perugia (*Ind. suppl.* xvii.), in the form
DE DONIS DEI ET DOMINI PETRI VTERE

FELIX CVM GAVDIO. In a more tender sense it occurs in the words “*sit tibi imperium meum cum hac puella concessum, utere ea felix*”—(Greg. Tur. vi. 30) with which the dying Tiberius II. made Mauricius at once his son-in-law and successor on the throne. Buonarroti also (*Vasi di F.* 208) thus interprets VT FX, placed around the figures of a bride and bridegroom on an antique gem of green jasper.

² This object is now placed with the Blacas Collection, of which, however, as I am informed, it did not form a part.

of Mancunium, with two others. These three measured, in diameter, $14\frac{7}{8}$ in., $17\frac{3}{4}$ in., and 20 in. respectively, or $1\frac{1}{3}$, $1\frac{1}{2}$, and nearly 2 Roman feet. I have failed to ascertain the existence of any pewter vessels of Roman work in continental museums. Their manufacture may have been exclusively carried on in Britain.

It will be well worth while to consider whether chemistry may not supply us with some agent that shall arrest the exfoliation, which has already done so much to mutilate the surface of the *lanx* found at Welney.

Besides numerous oak trunks, the only other objects discovered underground on the same estate are, a small pointed blade $6\frac{3}{4}$ in. long, and $1\frac{3}{4}$ in. broad at the hilt, probably one of the earliest forms of dagger known in the bronze age, and of somewhat unusual type, and also a well-preserved antler shed by a young red deer; but the present tenant, Mr. G. Daintree, having promised ere long to make a careful sounding of the whole field in which the treasure under consideration once more saw the light, I have little doubt that there is at or in the vicinity a rich and instructive harvest in store for the classical antiquary, especially as vases full of Roman coins have been found in the adjoining parish of Upwell.



The Roman sarcophagus, discovered November, 1899, in the North Green, Westminster Abbey.

(Length, 7 ft. ; height of the cist, 18½ in. ; thickness of the cover, 6 in.)

OBSERVATIONS ON THE ROMAN SARCOPHAGUS LATELY
DISCOVERED AT WESTMINSTER.

By the Very Rev. ARTHUR PENRHYN STANLEY, D.D., Dean of Westminster.

IN November, 1869, the Green on the north side of Westminster Abbey was lowered, under the direction of Canon Prothero, in order to render the ground less unsightly. It was also hoped that some traces might be found of the pit in which the bones of the illustrious persons buried in the Abbey during the Commonwealth had been buried after their disinterment at the Restoration. The ground at that time had been occupied by two prebendal houses, which with their gardens occupied this part of the North side of the Abbey, and the pit is described as having been situated in the back-yard of one of these houses. It is uncertain whether this spot has been found. The whole ground, however, was filled with remains of human bodies, and it is possible that a spot, where they seemed to have been thrown together in more than ordinary confusion, may have been the grave containing the remains of no less persons than the mother of Oliver Cromwell, the famous Admiral Blake, and the Prolocutor of the Westminster Assembly. But in the course of these proceedings another discovery was made, wholly unexpected, and equal in interest to any which recent excavations have produced, not only in Westminster Abbey, but in the whole metropolis.

Under the remains of some ancient walls, immediately beneath the surface, was found a massive stone coffin, covered with a stone lid, and having, on one of its sides, an inscription of incised letters of the best and most refined forms of the Roman character.

I was absent at the time in Italy, and the coffin was not fully excavated nor opened till my return from Rome, when, on arriving in Westminster, the first tidings that greeted me was the discovery of a monument belonging to the same

epoch and nation as the great city which I had just quitted. It was then opened in the presence of myself, the Canons in residence, Mr. Gilbert Scott, Mr. Franks, and Mr. George Scharf, who made a sketch of the whole scene. The bones which were found inside were those of a complete skeleton, that appeared to have been turned over on its face, and the skull was placed at the lower end of the coffin. There was nothing to indicate the rank of the person, nor in fact anything but the skeleton, with the exception of a few fragments of brick, apparently Roman brick, and a piece of dark grey slag-like substance, about four or five inches across, and this was evidently part of a large piece, being indented as though worn. Mr. Franks arrived at the conclusion that this was a portion of a lava millstone, brought from the neighbourhood of Andernach, of which many examples have been found on Roman sites in this country. There were also some few fragments of a pasty substance, like lumps of quicklime which time had reduced to a paste, as though the floor of the coffin had been strewn with quicklime.

I now proceed to examine the different questions suggested by this interesting discovery. The first and most solid ground of conjecture is the inscription, which is as follows :—

MEMORIAE · VALER · AMAN
DINI · VALERI · SUPERVEN
TOR · ET · MARCELLUS · PATRI · FECER.

This inscription has been submitted to various distinguished antiquaries both at home and abroad, amongst others to the Commendatore de Rossi and to Dr. Henzen, at Rome, to Professors Mommsen and Hubner at Berlin, and to Dr. McCaul at Toronto; it has also been inspected by Mr. Waddington of Paris, and an interesting letter has been received by Mr. Wylie from Padre Garrucci, who has entered with enthusiasm into the subject. I have also received much assistance from Mr. Joyce of Strathfieldsaye, whose attention has been directed to questions of this nature by his own excavations at Silchester. The result of these enquiries is as follows. The lettering of the inscription is so good as to induce the belief that it belongs to as early a time in the third century, as other circumstances will

permit. The circular O and the well formed M have been pointed out as peculiarly classical. The elongated I in VALERI and PATRI came into use in the time of the Dictator Sulla (*circa* B.C. 82—78), and continued to the middle of the third century; after which date it is said to have become extremely rare. But the appearance of the shorter i in AMANDINI would seem to indicate that this inscription must have been cut at the time when the purer form was beginning to degenerate. With this coincides the fact that neither Valerius Amandinus himself nor his sons have any prænomen. It seems that the practice of claiming the full Roman nomenclature of three names went out of fashion after Caracalla had granted the right of citizenship to the whole empire (A.D. 216). The word "Amandinus" is also not of the most classical form of Latin. It is in the reign of Alexander Severus that we find the beginning of these diminutives, such, for example, as Verecundinus for Verecundus. If these indications are correct, these data would all point to a period of the latter half of the third century. The form "Memoriæ," although unusual in purely classical inscriptions, is found in no less than forty-eight tombs in the collection of sepulchral inscriptions in the Lapidary Museum at Lyons, most of which belong to the age of the Antonines. They differ however in most instances from this, in having the letters D. M., "Diis Manibus," prefixed. One, however,—that numbered 548,—has not these letters, and begins thus, "Memoriæ æternæ." In coins it appears that the term "Memoriæ" is frequent at the date of Constantius Chlorus (A.D. 292—306), but not in other reigns.

The names themselves throw but little light on the matter. "Amandus," from which "Amandinus" seems to be the diminutive, occurs in one of the Lyons inscriptions.

But the word which attracts most observation is "Superventor." Its juxtaposition leaves no doubt that it is a proper name, like Marcellus, designating the eldest of the two sons of Valerius Amandinus. It occurs, as far as is known, once only in the ordinary literature of Rome. In Ammianus Marcellinus (xviii. c. 9), mention is made of a body of troops entitled Præventores and Superventores. The explanation given of these terms in Wagner's annotations on Ammianus (I know not on what authority) is that they were light-armed troops, the Præventores being em-

ployed as scouts, the *Superventores* as skirmishers and foragers. Mr. Black, in his ingenious discourse on the sarcophagus, delivered to the Middlesex Archæological Society, has pointed out four passages in the *Notitia Imperii*, where the word occurs, twice as "*Milites Superventores*," twice as "*Superventores Juniores*," but without further explanation. It is also found in the subscriptions of the Bishops to the first Council of Orange (A.D. 441; Mansi Concil., vol. vi. p. 441), where, at the end of the list, appears "*Ego Supervisor pro patre meo et Episcopo Claudio subscripsi et recognovi*." It is in this place interpreted by Ducange as "proxy." But for this there is no authority. It would seem from the various readings in the text of the Acts of the Council that the word occasioned some difficulty, but there can be no doubt that here, as on the sarcophagus, it is a proper name. In mediæval Latin it is (as appears from Ducange) used for a "marauder" or "robber."

The most curious circumstance in the appearance of the word in this inscription is that so exceptional a military term should already have been converted into a proper name. This would combine with other indications in inducing us to place the inscription as late as the other data will admit.

Beyond these several conclusions it seems impossible to form any clue as to the character, history, or rank of this the earliest Magnate connected with the sepulchral history of our great national cemetery. Those who remember the interesting and ingenious romance of Mr. Lockhart, of which the hero Valerius was a Roman Briton, may, if they choose, figure to themselves, by a pleasing illusion, that this sarcophagus belonged to him or his descendants.

2. With regard to the decoration of the sarcophagus, it may be observed that the two shield-like ornaments (*pelta*) which appear at the corners resemble exactly those we find on Roman monuments in the Northern counties and also repeatedly in Scotland, as figured by Gordon, Horsley, and in Mr. Stuart's *Caledonia Romana*, with the exception that on some of the Scottish and the Northumbrian monuments the heads of the shields are carved into the form of the heads of the Roman eagles.

3. The next question which arises is, whether the skeleton found within the sarcophagus belongs to Valerius Amandinus,



The cover of the Roman Sarcophagus found at Westminster Abbey.

Length, 7 ft. ; width, at the head, 2 ft. 5 in. ; at the foot, 2 ft. ; greatest thickness, 6 in.

or is that of a second interment ? And this again branches out into three separate inquiries.

First, is the sarcophagus in its original position ? With all deference to the ingenious argument of Mr. Black, we must be allowed to doubt whether this is possible. It is evident that the coffin was framed with a view to standing against some wall or cloister, in which the front would be visible, and the roughly hewn back invisible. Such was not the position in which it was actually found ; and, further, the surrounding wall seemed to shew that it could not have been thus placed except through subsequent transportation.

Secondly, what is the date of the lid bearing the large cross carved in low relief ? That the lid itself is of the same epoch as the sarcophagus may seem probable, from the circumstance that they are of the same stone (*viz.* Oxfordshire oolite), as appears unquestionably from the examination of the inside, both of the lid and of the tomb ; but it is another question, whether the lid has not been carved by subsequent hands into the form of the cross, as it now appears. Mr. Joyce has produced coins of Galla Placidia (*c.* 417—423), in which a figure of Victory is represented as holding a cross of the size of the human form, and being nearly of the shape of this one ; and he argues, that before a cross so formed could have found a place on the reverse of a coin, it must have been already made prominent before men's eyes elsewhere ; and, if so, that it may have been sculptured on the receptacles of the dead. This, if it could be maintained, would give to the sarcophagus an unique interest, as being the only example belonging to a Roman Christian under the Cæsars, in Great Britain. This is almost too good to be true. I am bound to confess that if, with Padre Garrucci, we are compelled to limit the sarcophagus to the third century, the general impression of antiquaries has been against ascribing such an antiquity to a cross of this form. Not to speak of the well known fact of the entire absence of a cross in the Christian catacombs, the cross of this lid appears to be much more rudely hewn than the letters of the inscription are engraved ; and it has been alleged that the floriated shape of its foot indicates a mediæval origin. It is for antiquaries to determine how far down in the history of England this cross compels us to descend. It may still, perhaps, be thought that even if not belonging to the Roman epoch, it

indicates that the second interment was of an earlier date than any other of which we have proof in the precincts of Westminster Abbey. If it can be proved to be of an earlier date, so much the better.

Thirdly, there is the examination of the skeleton. It has been carefully handled by the two most eminent authorities whom it was in my power to consult. One was Professor Huxley; the other, who has had the opportunity of examining it at greater leisure and in greater detail, was Dr. Thurnam, of Devizes. Their conclusions, on the whole, agree. "The skeleton," says Dr. Thurnam, "is that of a young man, probably not more than thirty years of age, as appears chiefly from the teeth, which are of full size, the crowns all eroded, doubtless from the use of grain coarsely prepared. The upper wisdom teeth are still protected by their bony sockets; that on the right of the lower jaw has not long penetrated the gum; that of the left side has not been developed." This circumstance seems fatal to the identity of the body with that of Valerius Amandinus. The two stalwart sons, Superventor and Marcellus, who erected the monument, could hardly have been the children of the youthful possessor of these wisdom teeth. To whom the bones belonged must, therefore, remain unknown. But we can conjecture something of his appearance and of his character. "The thigh bones measure $18\frac{1}{2}$ in.; the leg bones 15 in. The length of these bones doubled, gives 5 ft. 7 in. for the stature of the man, which is likewise the probable conclusion indicated by Professor Humphrey's rule, that the proportion of the stature is to the length of the femur as 100 to 27.5. The bones are thick and strong, and are evidently those of a well-developed muscular man." Professor Huxley ventured to remark, "that, if they were the bones of a churchman and Christian, he must have been a very militant churchman, and a very muscular Christian." "The skull, for that of a male," as Dr. Thurnam states, "is exceptionally small; the forehead is shallow, low, and receding; the globella full and prominent. The occiput is in great part absent from decay; perhaps in consequence of a certain amount of lime having been thrown into the coffin. The sutures of the skull are far advanced towards obliteration. The skull has none of the characteristics usually ascribed to the Romans. In particular, it wants that peculiar square-

ness of the forehead and face which are usually seen in the Roman cranium. It might be that of one of the men who served as auxiliaries to the Roman legions, but it is far more probable that it belongs to a later period. It has a very mixed, or so to speak, mongrel aspect."

We must, therefore, conclude that whoever was the second occupant—although he may have been a giant in strength and form—he was far from being entitled, by breadth or height of intellect, to interment amongst the heroes of Westminster Abbey.

Dr. Thurnam has pointed out two passages in the history of the Venerable Bede which illustrate the use of a Roman sarcophagus for the interment of great persons in later ages. The one is Sebbi, king of the East Angles; the other is Etheldreda, the Saxon princess who founded the Cathedral of Ely.¹ It is related that Sexburga, her sister, wishing to give Etheldreda a more honorable burial, and finding in the marshes of Ely no stone worthy to construct a coffin, sent to Grantchester, probably a Roman station near Cambridge, where a well worked sarcophagus and lid had been found (the *Liber Eliensis* presumes almost by miracle), in which the bones of the sainted foundress were placed. This coffin, which was unfortunately destroyed at the time of the Dissolution,² was doubtless such an one as that of which we are now speaking.

The sarcophagus has been removed, first to the cloister, and then, for the sake of greater security, to the nave of Westminster Abbey. It is there placed in what is called the "Whigs' Corner," under the north-west tower, where it is hoped that it will be sufficiently protected from injury, and at the same time the public will be enabled to inspect at ease the oldest and the youngest glory of that great edifice.

¹ Bede, *Hist. Eccl.*, lib. iv. c. xi. and xix.

² Dr. Caius, who saw it at the time of the Dissolution of the monastery of Ely, speaks of it as being of very ordinary stone.

It was suggested by Dr. Rock that the interment of so eminent a person (as is implied by the sarcophagus) in so un-

usual a position as the north side of the abbey, may have arisen from his having been excommunicated.

Mr. Prothero called attention to the circumstance that the whole surrounding gravel was filled with bones, and also contained graves, lined with chalk, in the direction of the shrine.

THE SARCOPHAGUS OF VALERIUS AMANDINUS.

By the Rev. JOHN McCaul, LL.D., President of University College, Toronto.

THE principal characteristics of this object, by means of which we may hope to determine the questions that arise regarding it, are—the cross on the lid, the inscription on the cist, and the fragments of brick and stone that were found within. The cross, and the locality in which the object was found, suggest the opinion that the coffin contained the remains of a Christian, who was probably a monk of the adjoining monastery; and the peculiarities of the cross are such as to produce the impression that its date should be assigned to the middle ages. This impression is supported by the fact, that the earliest example of this symbol¹ (not monogrammatic) on Christian sepulchral stones, of which the date is known, is of the year 407 A.D. See De Rossi, *Inscript. Christianæ*, n. 576, and *Christian Epitaphs of the First Six Centuries*, p. 45. It is also strengthened by the following statement (if correct), given by Grose (*Supplem. to Antiqu. of England and Wales*, Addenda to the Preface, p. 29). “At first they [gravestones] were only inscribed with the name and rank of the person there buried; the figure of the cross was not engraved on them, to avoid the indignity of its being trampled under foot. Afterwards Kenneth, King of Scotland, is said to have issued an order for cutting the cross on all gravestones, but directed that care should be taken not to trample on them. Some regulation of this kind might possibly take place in England.” Additional force is given to this supposition by the fact, that the usage—if not the rule—in England in

¹ It is a Latin cross without any addition. There seems to be an example of a Greek cross inscribed within a circle of

the date 345 or 346 A.D. in the inscription given from Marini by De Rossi, note, p. cix.

the eleventh and twelfth centuries was, that monks should be buried in stone coffins, as appears from the regulations made by Anselm on the subject, and the Statute of Warin, Abbot of St. Alban's.² See Walcott's *Sacred Archæology*, p. 166, and *Gesta Abbatum Monasterii Albani*, i. p. 198, edit. in the series of *Chronicles*, &c., under direction of the Master of the Rolls. And yet—as to the peculiarities of this cross—there are approaches to its form in the fifth and sixth centuries. See De Rossi, n. 879 of the date 482 or 461, n. 893 of the date 490, and n. 1013 of the date 527; and a coin of Placidia of the date *circa* 417 or 462, in Akerman's *Roman Coins*. And there are examples, as I am informed, of crosses *pattées* on coins of the fourth and fifth centuries. With regard to the extraordinary length of the lower limb of this cross, it may be ascribed to the elevation that was on the original lid, and that thus fixed the place for the transepts. See examples of this form of lid in Wellbeloved's *Eburacum*, plate xi., fig. 3. Nor is the coping of the lid peculiar to the Middle Ages; similar ridging was used in the Roman period. See Wellbeloved's *Eburacum*, p. 108, and Smith's *Roman London*, plate iv. On the latter, I may remark, *obiter*, that it is more like a Christian sarcophagus than that which we are considering, excepting the cross. See Christian Epitaphs, plate II., fig. 2, and the woodcut representing the making of a Christian sarcophagus in Fabretti, *Inscript. Antiq.* p. 578. Again—as to stone coffins—the cist of this has not the peculiar characteristics of those in which monks of the eleventh and twelfth centuries were buried; and we know that the use of receptacles of this material for the dead was not uncommon in England in the seventh century. See Bede's *Hist. Eccles.*, iv. 11, 19, 30. Nor is there any reason for doubting the at least occasional use of stone coffins between the Roman period (in which they were common) and the seventh century.

It appears, then, that, so far as the material of the sarcophagus and the form of the cross, the object may have been of as early a date as the fourth century; but our in-

² In the statement referred to above, we must limit the words *ante cunctis temporibus* to the monks of St. Alban's, and the meaning of *in lapideis sepulchris* is not clear. The reference may, possibly,

be not to coffins made of one block, but to sepulchres formed of several stones, resembling the primitive kistvaens. See *Archæologia*, v. p. 224.

quiry now must be—how does this supposition agree with the evidence of the inscription? In this case fortunately there can be no doubt as to the text or the interpretation of it. The words are plainly: *Memoria Valer. Amandini Valerii Superrentor et Marcellus patri fecer.*—i. e., “To the memory of Valerius Amandinus. Valerius Superrentor and Valerius Marcellus made (this) for (their) father.” The only terms in this that are rare are the names *Amandinus* and *Superrentor*. I have never before met with either of them. *Amandinus* (probably originally *Amandianus*) is the masculine form of the name *Amandiana* found in Gruter; and both *Amanda* and *Amandus* are not uncommon—examples of them have been found in Britain. *Superrentor* is a *cognomen*, like *Tutor*, *Adjutor*, *Viator*, *Cunctator*, *Subrentor*, &c. On *cognomina* see Maffei, *De Nominibus Romanis*, p. 15; Zaccaria, *Istituz.*, p. 81, xxix. The meaning was probably equivalent to “surpriser,” and the name appears rather suggestive of a German or Gallic origin of the family. It seems probable, however, that the persons named in the epitaph were Romanized Britons, and that their *gens*—*Valeria*—indicates a prevailing taste for this *nomen*, derived from the Imperial family, e. gr., *Valerius Diocletianus*, *Valerius Maximianus*, *Valerius Constantius*, *Valerius Severus*, *Valerius Licinianus*, *Valerius Constantinus*, *Valerius Constantius*. Thus we have the *nomen* “*Aurelius*” prevalent in Dacia, derived from the Imperial family. See “Die Römische Inschriften in Dacien,” by Aekner and Müller. Thus also the *nomen* “*Junius*” prevailed in Spain, derived from *D. Junius Brutus*, who was victorious in that country. See Reinesii *Syntagma*, p. 137; and Hübner’s *Inscript. Hispaniæ Latinæ*. This conjecture relative to a partiality for the *Valeria gens* in Britain is countenanced by the fact that both *Valerius Constantius* and *Valerius Constantinus* resided for some time in the island. The former Emperor died there in 306 A.D., and his son, the latter (subsequently the Great), whilst living there at the time was proclaimed Caesar. It is also supported by the following inscription³ given by Horsley, *Brit. Rom.*, p. 314. *Titia*

³ The copy of this as given by Horsley from Gale’s *Antiquiæ Itinerarium* presents the rare use of points, in the form of a comma, at the top of the letters. From

this and other characteristics it may be conjectured, with some reason, that the inscription is not older than the fourth century.

Pinta vivit ann xxxviii et Val Adiutori vivit ann xx et Variolo vivit ann xv Val Vindicianus coniugi et filiis F. C. i. e. Titiae Pintae—vivit annos triginta octo, et Valerio Adjutori—vivit annos viginti, et Variolo—vivit annos quindecim, Valerius Vindicianus coniugi et filiis faciendum curavit. There is a remarkable similarity in the character of the names—*Adjutor* corresponding to *Superventor*, *Variolus* (a diminutive) corresponding to *Marcellus* (a diminutive), and *Vindicianus* (from the maternal *Vindicia*) corresponding to *Amandinus* = *Amandianus* (from the maternal *Amanda*).

But to return to *Superventor*. I have no doubt that it does not indicate that the person was one of the *Superventores* (or *Præventores*) mentioned by Ammianus Marcellinus, and noticed in the *Notitia* as serving both in the east and the west. See Böcking, i. p. 446 ; and Vegetius, v. 7.

The commencement of the epitaph with *Memoriæ*, without D.M. preceding it, is not rare in Pagan inscriptions. See Gruter, CCCL. 6, DCCLXIII. ; Orelli, 850 ; Henzen, 6833 ; Morelli, *De Stilo*, i. p. 176 ; Renier, *Inscript. de l'Algérie*, 3333, &c. On the other hand it is not common in ancient Christian epitaphs without an adjective, such as *bonæ*, and in the genitive case. And yet I have no doubt that the form was used by Christians, even as early as the fourth century. For examples of it contracted into M.M. or M. see Henzen,⁴ 7354 of the date 397 ; Renier, 3440 ; and Orelli, 4460 : and of it *in extenso*, see Renier, 3441, 3442, 3447, 3448. The use of FECER instead of F.C., however, is rather characteristic of Christian usage. See *Christian Epitaphs*, p. 45. But it is often found in Pagan epitaphs ; and in both it may sometimes denote actual making. See *Christian Epitaphs*, p. 45. Thus here it may possibly mean that *Superventor* and *Marcellus* themselves cut the coffin, whence it might be inferred that they were stone-masons or manufacturers of stone coffins. The word *fecerunt*, however, seems to have been often used in the sense, *faciendum curaverunt*.

Let us now consider the lettering and the ornamentation of the cist. From the good shape or cutting of the letters

⁴ Henzen regards M as standing for *Memoriæ*, but De Rossi, p. 193, for *Memoria*.

On the distinction see *Brit. Rom. Inscript.*, p. 211.

I am afraid to draw any inference as to the age, such as whether the inscription is of the second, third, or fourth century. My experience leads me to regard this criterion of date as often fallacious. There are cases, I doubt not, in which such deductions are warranted; but Maffei's remarks on this subject (*Art. Critic. Lapid.* iii. 2, 3) are, I think, generally true. See also Morcelli, ii. p. 309.

The absence of ligatures is, in my judgment, a more certain indication of antiquity; and here we find, not merely well-formed characters, such as—if we cannot determine their date within the Roman period—certainly differ widely from mediæval letters, but the absence of ligatures, even where they might have conveniently been used, *scil.* instead of *SVPERVEN* followed by a vacant space, *SVPERVENTOR* or *SVPERVENTR* which could have been brought into the second line. Nor must we omit noticing the triangular point uniformly placed after each word, whether contracted or not, and the use of the tall I even for the single letter.

These characteristics seem to me to support the opinion of those who have regarded the inscription as of very early date, and to justify our placing it certainly within the Roman period, and not improbably in the second century. This, moreover, is strengthened by the ornamentation of the cist. The division into three panels, the middle one bearing the inscription, and the two at the extremities filled with crescent-like decorations (*peltæ*), closely resembles the treatment of inscribed stones of the age of Antoninus Pius, such as those given by Gordon (*Iter Septentr.*), also by Horsley (Scotland, *Britannia Romana*), and Stuart (*Caledonia Romana*). So far then as the inscription, the cutting of it, and the ornamentation of the cist, it may, I think, be safely said, that no one would hesitate in pronouncing it, *per se*, as Pagan, especially as it has not one single feature peculiar to Christian gravestones or sepulchres, or usually found on such,—I mean single names, the use of the terms *depositus*, *depositio*, *in pace*, or of the symbols a fish, an anchor, a dove with a branch, &c., &c. And yet we must beware of pushing these arguments too far. There are certain epitaphs that have no characteristics whereby we may distinguish them as Christian or Pagan, some of which, from the locality in which they were found, or accidental circumstances, have

been classed among the former or the latter. Again, the ornamentation, although used in the second century, may have been and probably was continued through the Roman period, especially in coffins in which a style, once adopted, would very probably remain for a considerable time. Nor is it necessary to suppose that the coffin and the inscription were cut by the same person. The coffin may have been made by a Pagan and the inscription cut or ordered by a Christian, as in De Rossi's n. 118. With regard to the lettering, I have already stated my opinion, in which I have the support of both Maffei⁵ and Morcelli,⁵ that the good shape and cutting of the characters (*literæ quadratæ* I mean) are fallacious tests of the date within the first four centuries. The absence of ligatures may be explained by the necessity for clearness in such an epitaph as this composed almost wholly of names, and we are not without examples of similar points and tall I's in inscriptions after the time of Constantine. Moreover, the space left vacant after X (if not caused by some defect in the stone), as manifesting attention to syllabic division, indicates a late rather than an early date. Before leaving the consideration of the cist, we must notice a peculiarity in its form that appears to distinguish it from those of the Roman period, viz., the bevelling at the foot. In this it somewhat resembles the stone coffins of the Middle Ages. It is possible that this peculiarity may have distinguished Christian sarcophagi at an early period; but I know no authority for this. Neither have I seen any example of the form in a Roman coffin. The peculiarity may, possibly, have been caused by some defect or break in that part of the block that prevented the mason from continuing the sides in parallel lines.

But we must consider the cover and cist not only sepa-

⁵ I subjoin extracts from the passages to which I refer. "Illud primum est, Scripturæ argumentum minime certum et indubitatum esse, it aut ex eo tantum de sinceritate lapidum possimus decernere, nam ea quidem quandoque est in lapidibus Scripturæ facies, ut validum aut vetustatis aut novitatis indicium faciat; ut scilicet ita ambigua est, ut argui nihil possit. Secundo haberi pro certo velim, aliter toto celo, qui e literis, num sub Trajano, an sub Commodò, num secundo, vel tertio, vel alio quodam seculo; num

Romanis, vel Longobardis, aut Gothis Italian tenentibus inscripti lapides fuerint, decidi posse opinantur." Donati *Suppl.* i. p. 177.

"Neque a Maffeo dissentio, quem verissime scripsisse puto lapidas singulis ætatis exstitisse, qui rectas, quique distortas literas facerent; titulosque ab iis modo accurate atque eleganter modo negligenter atque inconcinne inscriptos esse, ut ii omnino fallantur, qui plerumque a scriptura ætatem inscriptionum certe se nosse dictitant." Ed. Padua, 1818.

parately, but together ; and here the first question that presents itself is—are they made of the same kind of stone ? Of this there is, I believe, no doubt. They are both cut from the soft shelly oolite, probably obtained in Oxfordshire. I have already suggested some reason for believing that the cover was the original one ; and here we have an additional argument in favor of this opinion. We must bear in mind, however, that this stone may have been usually selected for such purposes on account of the facility of working it or getting it ; and we may urge in confirmation of this the fact that another sarcophagus, found in London (see Mr. Roach Smith's *Roman London*, p. 459), was made of oolite, designated by Mr. Smith as “Barnaek rag.” An objection may also be advanced against the supposition that the cover was the original one, drawn from the facts that it is not bevelled as the coffin is, and that it does not fit the cist well. The strongest inference, however, from these facts seems to be that the present lid is not that which was made for the coffin by the manufacturer. It may, notwithstanding, be that which was originally used.

But another and a very important particular in the object as found remains to be noticed. In the cist, along with the remains of a man, viz., the skull and bones, were fragments of bricks believed to be Roman, and of a peculiar volcanic stone used for mill-stones, and commonly met with on the sites of Roman stations in all parts of Great Britain. The presence of these fragments—especially when we remember that no Roman memorial has been found in this locality—seems to indicate that the remains were those of the original occupant of the coffin, who was placed there during the Roman period. It is possible, indeed, that on the occasion of introducing the second corpse the bones of the first occupant were thrown out and the fragments left, but to me it seems highly improbable that Pagan objects would be permitted to remain in the coffin with a Christian corpse. What the object of placing such fragments of brick and stone there was can only be conjectured, and I am almost afraid of indulging in suppositions, as I have no information as to the size or appearance of the fragments. It may be that they were placed there as emblems or indications of the trade or occupation of the deceased, as we find symbols cut on Pagan and Christian gravestones with this object.

This supposition derives some countenance from interpreting *fecerunt* as actually "made." It may be that the deceased was stoned to death,⁶ and that these were some of the missiles thrown at him. It may even be that he committed suicide, and that these fragments were thrown in, as in later times shards were. See Akerman's *Remains of Saxon Paganism*, p. xvii. Finally, it may be that they were used merely for arranging or straightening the corpse.

It now appears that the theories regarding this object should be formed relatively to the suppositions that the remains found in the coffin were or were not those of the original occupant. On the latter of these suppositions we may regard (1) the case as an example of the use of a Pagan coffin, from which the original Pagan occupant had been removed, by a Christian of a period as late as the eleventh or twelfth century, whilst, on the other, it may be (2)⁷ that a Christian of the fourth century was placed in a coffin made by and for a Pagan, but with the inscription and cross added; or (3) that a Pagan and his coffin were christianized by cutting a cross on the cover, or by substituting a crucifer lid for the original one, as it may not improbably have borne the letters D.M. ET.

On the use of Pagan coffins or *arcæ* by Christians, see De Rossi's notes on nn. 118 and 12; and on the cutting of a Christian inscription on slabs bearing Pagan epitaphs, and the application of such stone to close the *loculi* in the Catacombs, see *Christian Epitaphs*, p. 65. In all these cases, however, there is a Christian epitaph, or there are both a Christian and a Pagan.

I must also add that we have an example in England of the use of a stone coffin as the receptacle of a corpse different from that which had originally been placed in it. See *Wellbeloved's Eburacum*, p. 111, where we have the inscription on a sarcophagus found near York. From it it is certain that the child placed in it was ten months old;

⁶ Walcott, *Sacred Archaeology*, p. 191, in speaking of the cross, says,—"The martyr's tomb bore it;" and in p. 86, under the term "Burials,"—"The instruments of passion,"—"were often interred in the tomb." I have seen these statements elsewhere, but I do not remember ancient authority for them in the cases of martyrs of the first four cen-

turies.

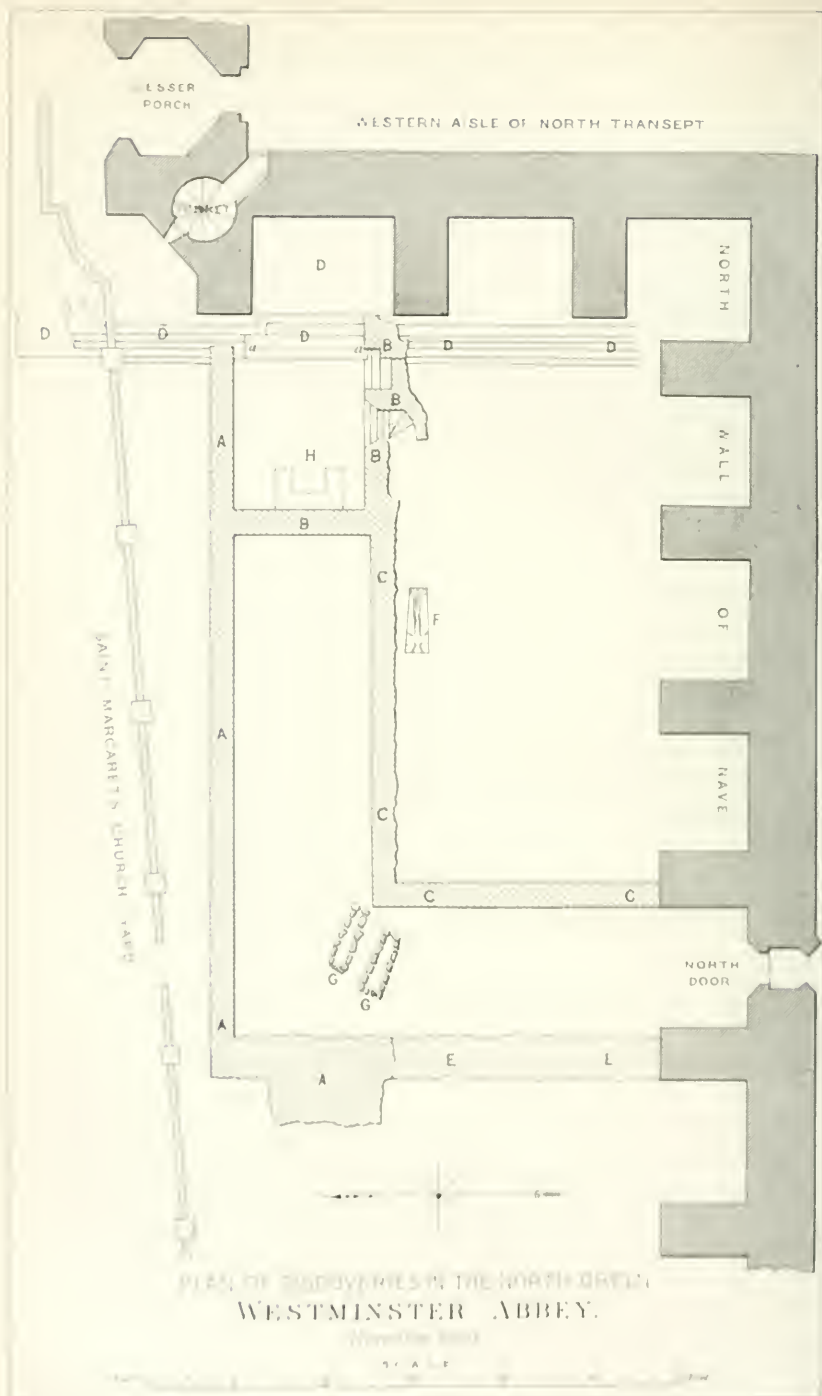
⁷ In this hypothesis it is not supposed that the cover which was found is that which was intended for the cist, but that that was rejected on account of Pagan characteristics, and another lid of an ordinary sarcophagus selected on which the symbol of Christianity was carved.

but, on removing the lid, "the skeleton of a child of a much more advanced age than the inscription indicates was found within."

The theory marked (3) is based on a conjecture, that on the consecration of a churchyard the coffins of Pagans were allowed to remain if Christianized ; but I know no authority for this. Nor does it seem probable, for we know that in the case of a church, Pagan corpses were "pulled out" of their coffins. See note, p. xix., Akerman's Remains of Saxon Pagandom.

The choice then seems to lie between (1) and (2), and on the whole I now incline to the latter. I am unable, however, to supply authority for the use of this form of cross on sepulchral monuments of the fourth century, nor can I prove that such a use was peculiar to the British church at that time.





SOME ACCOUNT OF THE DISCOVERY OF THE ROMAN COFFIN IN THE NORTH GREEN OF WESTMINSTER ABBEY.

By HENRY POOLE, the Abbey Mason.

THE Dean and Chapter of Westminster, in their desire to improve and, as far as possible, to restore the architectural features of the Abbey, determined, in the autumn of 1869, under the advice of their architect, Mr. G. G. Scott, R.A., to remove from the North Green the earth and rubbish which had there accumulated for several centuries. A similar work had just before been successfully effected in the green of the great cloister, whereby nearly three feet of earth, which had gradually risen against the bases of the buttresses, as well as against the beautifully moulded seats of the windows, was cleared away. The architectural proportions of the four sides were developed, and for the first time seen after three or four centuries of gradual concealment. These and other like discoveries excited the hope that similar operations on the North Green would lead to analogous results.

These operations began at the western end, towards the gates. As it was known that two canons' houses had stood here up to 1737,¹ and that since that period the area had been used generally as a place of interment for the bedesmen and inferior officers of the Abbey, and also as a mason's yard during many years of the restorations of Henry the Seventh's Chapel, little was expected to be exhumed or displayed by the clearance. Indeed, westward of the north aisle door, nothing but masses of early brickwork and loose brick rubbish—the *débris* of the old houses—were found; but, on approaching the Early English portion of the nave, ancient stone and rubble walls began to show themselves. Some portions of these had been cut away by the excavators, but this destruction was arrested, and it is hoped that what has thereby disappeared was only the upper part, which would now have been a little above the present turfed surface. A careful examination of the ground towards the north transept was now made under the direction of Mr. G. G. Scott; the surfaces of the tops of the walls were gradually displayed as shown on the accompanying plan; and holes were dug in various parts to ascertain the depths.

¹ These two houses were situate against the four buttresses towards the tower, the statues in the niches of which they are said to have preserved from the effects of the north winds. There is a tradition, and perhaps a record, that the gardens of

these two houses were eastward. Perhaps therefore the houses may have faced the west; and as the north door of the nave was the means of communication with these houses and the Abbey, it would open into the back gardens.

It was in the digging one of these holes that the Roman coffin was first accidentally exposed to view. (See F, in the accompanying ground-plan.) It might otherwise have escaped notice. The lid was of course first seen; and in digging down lower to ascertain the depth, those employed were astonished to find the indubitable marks of its Roman date. The lid had previously been much shattered, and there was an opening under the end of the lid at the head sufficiently wide to put in a lump, and thus perceive that the coffin contained a skeleton. The Dean and the other authorities were at once apprised of the discovery, and arrangements were made for a formal opening and examination. On removing the broken parts of the lid the skeleton was displayed. It had evidently been subjected to violence by a previous examination. The skull had been removed from its place, being found towards the feet; and the whole skeleton had been reversed, the back being upward. All the parts, however, it is believed, were present; the whole was in tolerable preservation, especially the teeth, which were fixed in large and powerful jaws, and much worn. The opinion immediately formed was, that the remains were those of a skeleton of a man below middle age, of powerful make, and rather above middle size. The anatomical and ethnological details will be found in other notices of the discovery.

The coffin contained nothing to indicate the rank or occupation of the deceased. There was found in the coffin a quantity of loose rubbish, which may have fallen in at the previous examination, to which allusion has been made, and perhaps through cracks in the broken lid, which had been very roughly bedded on thick mortar on the coffin. There was also found a quantity of slacked lime in a pasty state, as though lumps of quick-lime had been thrown in, and the moisture of the surrounding damp earth had gradually slacked it; and there was also found a piece of volcanic slag, of great hardness, and of a brownish colour, measuring about 7 in. by 4 in., varying from 1 in. to $1\frac{1}{2}$ in. in thickness. It had a



flat depression on one surface, bounded by a circular margin, and, as well as can be remembered, of something like the annexed form. In testing the hardness of this fragment it broke in twain. The form immediately suggested the idea that it was

part of a quern or early hand-mill, and that its existence in the coffin might furnish some clue to ascertain the date of the deposit or identify the occupant. Professor Huxley, Professor Rolleston, and Dr. Thurnam have, however, made minute inspections of the skeleton; and the coffin has been very carefully examined by the Rev. J. G. Joyce, and others. The information that will be derived from their observations will render any further remarks unnecessary.

The position of the coffin was, in depth, about two ft. from the level of the nave floor to the top of the lid; it was nearly 38 ft. north of the nave wall; 46 ft. west of the transept wall; and opposite to the third bay of the northern buttress. Its direction was due east and west. It was surrounded with the fine red river sand, which is found everywhere around, a few feet below the ordinary surface, and covered with earth and rubbish. From observations previously made with regard to the more ancient levels, it may be presumed that the coffin lid, at some former period, was exposed its whole thickness, and that the chest of

the coffin had in its then position always been surrounded and protected by the sand. This was, no doubt, the ordinary position of such coffin lids of early date, as shown in those of the south cloister walk, and in that lately found in the earth at what, doubtless, was the ancient level of the cemetery, adjacent to the chapter-house, and possibly the resting-place of *Algeric*, Bishop of Durham, who died in 1072. The sand around the Roman coffin contained many bones, which had been thrown in. From the position of the wall (C, C, in the plan) close to the coffin, it is probable that it was built subsequently, for the lower edge of the wall was near the upper edge of the coffin. If this conjecture is right, it is probable also that those who built the wall exposed the coffin, and that at the same time they may have opened it and disturbed the skeleton. Considerable pains were taken, at the suggestion of Mr. Black, the eminent antiquary, in digging deep trenches in order to discover, if possible, the vestiges of a Roman road, but without result. Nor has any Roman relic of any kind, either brick, tile, coin, &c., been found either on this, or, as far is known, on any former occasion.

The stone of the coffin is a shelly oolite, very much like that found on the banks of the Windrush in Oxfordshire. The lid is of a material similar in quality, with the slight difference found in adjacent strata or blocks of the same kind of stone.² The workmanship on the front of the coffin is beautifully executed; its character, as well as that of the design, would indicate a period of peace and refinement. The high state of preservation of the lower part of the coffin, which has hardly lost a grain of its substance by decay, may be attributed to its having been protected under cover from rain and frost during the early period of its existence; and since then the earth in which it has been concealed and protected has maintained it intact. Judging from experience, a stone of this friable nature, and one so absorptive of moisture, would not retain the delicate markings and smooth surface which it now presents after a few years' (say ten or twenty) exposure to driving rains and frost.

The Oxfordshire oolite, it may here be observed, is found to have been in use at every period of the construction of the Abbey, from that of the Confessor to the time of Sir Christopher Wren, who largely used the stone for outside repairs, displacing thereby the old Godstone and Reigate firestone, which no doubt was then extensively decayed. Two other coffins of this stone were also found about the same time. One was in the earth, not many feet west of the Roman coffin. It was shaped for the head and shoulders, and was nearly complete there; but the foot was broken, and the sides had been cut away. It appeared to have been utilized as a bottom for a drain. The other is a coffin of the same shape, covered with a Purbeck marble lid, forming part of the pavement of the ambulatory, and closely adjacent to the tomb of Queen Eleanor.

The lid of the Roman coffin, which may have been wrought many centuries after the coffin, must have been exposed, as before suggested, to the corroding action of the weather, as well as to the abrasion, from

² A chip of both chest and lid has been kept, and the examination will prove the similarity, but with difference

enough to show that the pieces are from different blocks.

various causes, in its position just above or perhaps, even, after a time, level with the ordinary surface of the ground.

This natural history of the coffin will not suffice to satisfy the inquirer as to the time and other circumstances of its workmanship; but the marks of the craftsman, if duly investigated, will suggest reflections which may tend to throw light on this subject.

The finished front of the coffin which, as before indicated, is the design of an artist of cultivated taste, and, if not his workmanship also, is that of an accomplished and skilful mason.



As the other parts of the coffin were concealed from observation, they are wrought accordingly, but yet with accuracy and neatness consistent with the delicacy of the front. The ordinary

axe, or a tool producing such an effect, appears to have been used all over the secondary surfaces. The markings of this tool are somewhat faint, especially in the present position of the coffin, and the partial and broken light of that part of the Abbey; but with the aid of a bright lamp the tool-markings will be easily perceived, especially at the back and head. This tool or axe would seem to have been about $2\frac{1}{4}$ in. in width, and of the ordinary shape, with its long wooden handle. To such a tool as this would be due the strokes now visible, about $\frac{1}{2}$ in. or $\frac{3}{4}$ in. apart. They present at the side and end this appearance. (See woodcut.) The end is marked, towards the bottom, with two courses of



herring-bone tooling, due perhaps to the position of the workman when operating thereon. The inside, if rightly remembered, is marked with the chisel, in succession to a pointed tool, and then scraped.

Comparing the ordinary parts of the lid, their workmanship is of a very inferior and even rude character. The plan of the outline of the coffin is true and symmetrical; (fig. 2) that of the lid is comparatively irregular and carelessly shaped to the coffin beneath. The straight lines in the diagram (fig. 3) represent pretty nearly the form of the plan of the coffin; the somewhat crooked lines beyond show the ruder edges of the lid. The front of the coffin is slightly rounded in its length, but so gently and truly as to be imperceptible to ordinary inspection. It is of the nature of an *entasis*, and was doubtless done intentionally. The corresponding edge of the lid is wrought in utter disregard of this delicate feature.

And now to describe and, at the same time, to compare the workmanship of the front of the coffin with that of the top of the lid. The front is divided into three compartments; the middle, containing the inscription, is about 4 ft. 6 in. long and $14\frac{1}{2}$ in. high, and is surrounded by a slight but tastefully effective ogive moulding, about $\frac{7}{8}$ in. wide and only $\frac{1}{2}$ in. deep. (See woodcut.) The two end compartments measure 13 in. in height and 8 in. in width; they are cut in square at the edges, about $\frac{1}{4}$ in. deep, and in each is a carefully carved, conventional ornament, usually designated the *pelta* or "the Amazon

shield." All the three compartments are bounded by a plain border, about $1\frac{1}{2}$ in. wide. The letters of the inscription are beautifully formed, and are evidently the work of a skilful engraver, but they show some signs of haste in their arrangement; for, while the letters in the first two lines are bold and somewhat scattered, those of the third are irregularly crowded, and in one place there occurs an abbreviation or ligature in the manner frequently found in Roman inscriptions where space was deficient. It may have been that the coffin was "ready-made"³ at the time of the decease, and that the inscription was afterwards engraved *in situ* and somewhat hastily, or at least without the consideration and adjustment which a modern engraver would give to it.



Ogive moulding. Orig. size.

The top of the lid is slightly coped, and thereon is wrought a long cross, its three upper limbs shaped as those of the cross termed, heraldically, "*patée*," and its long shaft terminating in what appears to have been a trefoiled ornament, but is so bruised and worn that its original form is hardly definable. The setting out or drawing of the cross, though bold and effective, is not truly central nor symmetrical; and the conception of the form could hardly be assigned either to the same artist or to the same period, and certainly not to the same workman. The surfaces sunk down to give the cross relief are unequal in depth; and the inequality in the arms of the cross betoken a workmanship incompatible with that of the panels in front. It is true that the chipping and wearing on the lid contribute to give the whole surface an appearance of irregularity, but the eye of the workman can easily detect original imperfections quite incongruous with the coffin front.

It will be observed that the foot of the coffin is beveled on each side, about 6 in. in length and about 2 in. in depth. These bevels were evidently hidden at first; perhaps the foot went so far into a cavity of some sort; and, if so, the foot of the lid should have the same bevels and the same allowance for concealment, whereas the lid is very roughly wrought at the foot, and the foliated foot of the cross reaches to the very extremity.

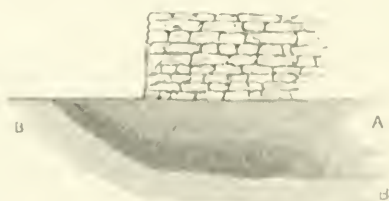
All these circumstances seem to lead to the conclusion that the workmanship of the coffin and that of the lid are not only by different hands, but also of different periods. It is possible that the lid may have pertained to the coffin originally, that the original mouldings and ornaments of the lid may have been rudely cut away, and the present shape produced. Then the original skeleton might have been ejected from the coffin, the lid reshaped somewhat in haste, and the more modern inhumation effected. But it is perhaps more probable that the original lid had been wholly thrown aside, and the present cover formed hurriedly when the old Roman coffin was appropriated for a secondary occupant.

As akin to the subject may be mentioned the discovery of two remarkable internments only a few feet west of the spot where the Roman

³ Probably the advantage of portability would lead to all coffin blocks being dishied out and shaped in the quarry before sending them to any great distances.

coffin lay, and at a depth of about 4 ft. below the present surface. These are evidently very primitive interments, and probably of ecclesiastics. The skeletons were perfect, not a bone being out of place. The two exposed were surrounded with blocks of roughly-formed chalk. Their shape and position are shown on the plan (G, G). The skeletons had apparently not been protected by any covering; if any ever existed it would have been of wood, now entirely gone. Perhaps this suggested covering may have helped to preserve the skeletons. They were those of young, or, at least, middle-aged persons, the teeth in both cases being perfect and bright. Traces of other similar coffins were seen, but these two only were exposed. The direction of the coffins, a little to south of east, is very singular. It seemed to point to the shrine of the Confessor. If the interments could be assigned to the period of the building of the church of Henry III., when the shrine of the saint was in the highest estimation, it would perhaps account for the direction towards the shrine being given to these interments, and the application of chalk to form, as it were, the walls of a coffin, that material being then in abundance on the spot.

Attention must now be turned to the immediate object of the excavations on the North Green—the examination of the ancient walls which began to be visible—with a view also to the probable repair and restoration of the north porch. Mr. Scott was very desirous to ascertain the precise nature of the footings, and their form and extent. The results were as follows:—1. The baring of the footing (D, D, D, D,) of the west wall of the transept from buttress to buttress, and the discovery of the continuation of that footing 8 or 10 feet into the adjacent churchyard. 2. The discovery of a long wall (A, A, in the plan) running from near the corner of the transept westward as far the fifth buttress next beyond the little north doorway, where the wall spreads out to a large area and then (at E, E,) seems to have returned up to that fifth buttress. 3. The discovery of the two walls (B, B,) of a building which once existed opposite and next to the bay of the two western buttresses of the transept formed by the first-named wall, the bay of the buttresses, and two walls to the south and west now exposed. 4. The discovery of a wall (C, C, C, C,) in a line westward of the south side of this building, and returning southward to the fourth buttress, forming thereby an L-shaped enclosure terminating at the little north door.



Footings, North Transept.
A Concrete on a quicksand. B, B, Sand.

The footings (D, D,) of the north transept spread out to an extent of 5 feet beyond the face of the buttresses, and 16 feet beyond the external face of the wall between, descending by a series of steps to a depth of 9 feet

below the floor of the Abbey. Besides this stonework of ashlar and rubble, there is still lower a concrete footing about 3 feet wider. The formation of this footing at the part exposed is remarkable, for towards the outer edge it is but a few inches thick, but inwards its thickness is increased by the formation of the trench, the section of which is concave downwards, as though the trench had been dug when the sand was full of water, and the workmen were unable to make one of a rectangular section.

The footing of this wall, with its steps, returns eastward in front of the north porch to a distance of 10 feet, measuring from the face of the buttresses or the centre of the iron railing. Two feet within this there is an ashlar wall face and return looking west, so wrought as to appear to have been once in sight. This peculiar formation, and the great extent of the footings northward, suggest that these footings may have been those of an earlier building, especially when the long wall abutting longitudinally against the buttress at the angle is found to be of the same depth as the lowest part of the wall of the church. Hollar's print of the north front gives the same form to the angles at each side of Solomon's Porch as at present; and why the footings below are not conformable with the superstructure is noteworthy and well deserving of investigation.

The longitudinal wall (A. A), its massy termination westward, and the probability that it continued up to the fifth buttress (for at E, E, was found a line of loose rubble and concrete), together with its coinciding in depth with the deepest part of the main footings of the Abbey, make its original purpose obscure and well worth inquiry. Its position gives the idea of a boundary wall, but against this its great depth militates; and, moreover, there is a map extant, drawn by Henry Keene, the surveyor of the Abbey in 1755, showing the Precinct, in which the boundary line is partly coincident with the present curb and iron railing. The line is thus described:—"The red line is the ancient stone wall which bounded the Close or Precinct where the Ditch did not." This curb with its iron railing was probably placed there about 1737, at which time the canons' houses in the North Green were taken down; shortly before Solomon's Porch also was destroyed; but this could not have been the original and true boundary line, seeing that the original footings extend about 10 feet further north.

The eastern end of this longitudinal wall (A, A) and the wall opposite, connected by a return wall westward, enclosed a space about 15 feet wide, and, (presuming that a fourth wall completing the enclosure was built on the ancient step footing, partly cut away to form a level,) about 20 feet long; but this eastern wall was not found. The walls of the south and west sides go down about 5 feet below the level of the Abbey floor. In the south wall are the remains of two flights of steps (B, B), descending towards the bottom of the walls, that eastward being earlier and better formed than the other.

When this enclosure was discovered it was remembered that Dart mentions the old chapel of St. Edmund near the north door, which, becoming decayed, was taken down. This may have been the lower part of the walls of that chapel, but there is no feature in the walls themselves to show what may have been the superstructure, except the two doorways on the south side. That eastward may have been original, or, at any rate, an early formation; but that westward appears to be much

later, and may have been made when the area was used for some ordinary purpose, for on the west side of the area were found the remains of what had the appearance of a fire-place (H), formed of thin brickwork, and in front was a floor or hearth, about 3 feet wide, formed of blocks of fire-stone. The remainder of the floor was of earth.

The remaining wall is that which runs from the south-west angle of this enclosure, and then returns to the fourth buttress (C, C, in the plan). Its depth is only half that of the south and west walls of the enclosure eastward, being about $2\frac{1}{2}$ feet deep.

It was thought so desirable to retain all these vestiges exposed, that means were at once adopted. The long walls, being pretty near the surface generally, were either made up to the level of the new turf surface with concrete, or piers were carried up to indicate the line. The enclosure has been converted into a store-cellar (which was much wanted here) by excavating to the top of the concrete footing of the transept wall, underpinning the south and west walls to the same depth, completing the tops of the three walls to the level of their highest point, and then covering the whole with a light Dennett's arch, groined, and supported in the centre by a stone pillar. The whole is covered with slabs of stone, forming a level in the centre, and dripping all four ways, so that the structure, at its highest point, being only about 18 inches above the ground is quite unobtrusive. There is a descending access at the southern side, and the space formed northward to expose the extreme end of the ancient foundation there is easily approached between walls with an arch over them. Thereby every feature is distinctly and permanently indicated, and the more important parts actually exposed, while the space is fairly utilized.

ROMAN COFFIN DISCOVERED AT WESTMINSTER.

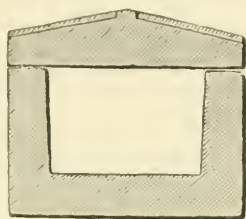


Fig. 1.

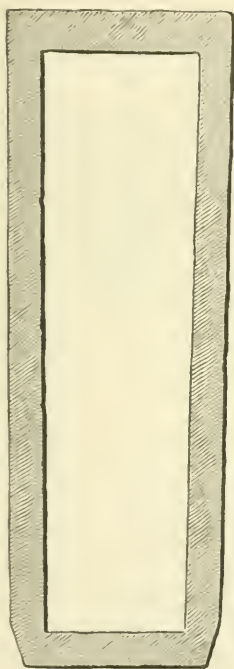


Fig. 2.



Fig. 3.

Fig. 1. Section of the coffin, showing the proportions of the lid.

Fig. 2. Plan, showing the interior; measuring, in length, 6 ft. 0 $\frac{1}{4}$ in.; width, 1 ft. 7 $\frac{1}{2}$ in.

Fig. 3. Diagram showing the irregularity of the lid as indicated by the faint line.

EXPLANATORY REFERENCES. SEE THE ACCOMPANYING GROUND-PLAN.

A, A, A, A. Rubble foundation-wall of the same depth as those of the fabric of the church.

B, B, B, B. Rubble walls of less depth.

C, C, C, C. Other shallow walls.

D, D, D, D. Stepped footings of the more ancient Porch.

E, E. Loose rubble footing.

F. The Roman Coffin.

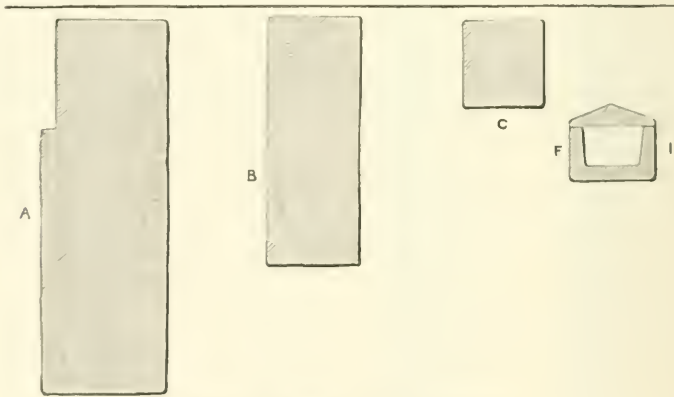
G, G. Skeletons surrounded by blocks of chalk.

H. Piers and back wall, as supposed, of a fire-place, built of thin bricks. This has been removed.

SECTIONS OF WALLS DISCOVERED IN THE NORTH GREEN, WESTMINSTER ABBEY;

Showing the proportions and depths, respectively, and also the depth at which the Roman coffin lay, as compared with the level of the adjacent Abbey Church.

Line of the level of the floor of the Abbey Church.



Scale, three sixteenths of an inch to the foot.

A. The great longitudinal Wall (A, A.).

B. Walls (B, B.) on the South and West sides of the enclosure adjacent to the North Transept.

C. Wall (C, C.) North of the Coffin.

F. The Roman Coffin.

Original Documents.

THE following document is a copy of an indenture, under the Privy seal, found attached to, and incorporated with, a roll of "Foreign Accounts" rendered by Thomas de Sweneseye, custos or warden of the King's mines (*minerarum Regis*) in Devon and Cornwall, of all the issues of the said mines, and also of other monies of the crown assigned for the payment of the expenses of working the same, between the 26th of February, 29 Ed. I., and the 13th of May, 35 Ed. I.; the same Thomas Sweneseye having been before appointed, by letters patent of the King, to have the custody of the said mines subject to the terms of the said Indenture under the privy seal.

The copy is a verbatim copy, extended, except in a few instances where the contractions seemed open to question.

In the same roll of accounts are to be found the details of the working of the mines under the indenture in the above years, of which I propose hereafter to print an abstract in such form as may best illustrate the indenture, and show both the nature of the operations on the silver mines under them in Byrland, and also the subsequent disposal of the ore and the refined silver under the control and direction of the Court of Exchequer, until the same was sent up, under escort, for coinage in the Tower of London.

The "Byrland" here referred to must be either the whole or some part, of the present manor and parish of Bere-Ferris, or Ferrers, and perhaps of the present borough, Bere-Alston, called from the original Norman family of Alençon, its former owners, which afterwards became a parliamentary borough, and claimed for its representatives members of no inconsiderable note down to very recent memory.

The site of these mines seems to coincide with that of a lode of argenterous lead which was worked under the Tamar river in my own recollection, until the difficulty of ventilation, and the irruption of the tidal water into the underground works, removed the "Tamar silver lead mine" from the category of existing mining companies.

The indenture is worth notice on another and independent ground. It illustrates the dealings of the Crown with the famous merchant firms of the Frescobaldi, and other companies flourishing in the thirteenth and fourteenth centuries, at the time of their intercourse with England during the prevalence of the Welsh, Scotch, and French wars, when the three Edwards found it needful to resort for financial aid to the opulent and free citizens of those great Italian republics, to whose enlightened commercial policy Von Savigny, in his *History of the Roman Law*, has traced the revival of the study of the Imperial Law.

In our public records and rolls of parliament the Italian bankers went

by the general name of "Lombards;" a word which eventually denoted a genus, rather than any specific city or territory.

The immediate object of the English working under the care of Thomas Sweneseye was the coining of silver money. I cannot perceive that any specific loan of money to the Crown is there referred to; and I am therefore not satisfied that the present directions of the Crown have reference to any mortgage or security for a loan.

We know indeed that, in many cases, the Lombard money-lender stipulated that his loan should be specifically charged on some productive branch of the public revenue; and thereupon he or his local agents became collectors of it, as well as creditors of the Crown. But in this case the produce of the mines, so far as regards the Crown and its officers (with the exception of so much of their produce as had been then lately worked by the Florentine Frescobaldi), appears to have been destined for the Royal Mint for the supply of coin.

The most satisfactory account of the relation and dealings of the great Florentine houses with the Crown of England, so far as they are recorded on the Liberate Rolls of the Exchequer, will be found in a paper contributed by Mr. E. A. Bond to the Society of Antiquaries, and printed in vol. xxviii. of the *Archæologia* in March, 1839. These documents establish the connection of these houses with England as early as the reign of Henry III. and thence downward to the close of the reign of Edward III., when the Florentine banks, both of the "Bianchi" and of the "Neri" factions, became involved in common bankruptcy by reason of the heavy, unpaid, loans due from the latter prince.

The authorities relied upon by Mr. Bond do not exhaust the subject; for the charter, patent, close rolls, and ministers' accounts enrolled in the exchequer, do not appear to have much engaged his attention.

The wealth and widely extended financial influence of these republics in the fourteenth century are also illustrated in the "*Economia Politica del Medio Evo*" of Gibrario.¹

The Lombard merchants are frequently mentioned in the Parliament rolls with some note of opprobrium, where they occur as identical or, at least, in close connection with, "Lombards, Jews, Saracens, and secret spies."²

The apparent connection of these several designations tends to confirm the current tradition in Cornwall that the Jews were the predecessors of the Lombard bankers under our earlier sovereigns; and I have little doubt that the well-known popular opinion in the western mining districts, which ascribes the relics of old workings, smeltings, and tools, to the rejected refuse of the Jews, is referable to this connection; and that Richard Carew and Camden go too far back when they attribute the name of "Attal Sarazin," (by which it appears that the refuse of old workings was then known,) to the "first arrival of Jews in Cornwall under the Flavian Cæsars."³

Attal or *attle* is still used as synonymous with the "deads" or waste rubble left on the surface of a mine (Price's *Mineralogia Cornubiensis*, p. 316); but the Jews have long lost the name of Saracens, if indeed they ever had it.

¹ Ed. Torino, 1861.

vol. ii. p. 332.

² Rot. Parl. Petitions, 50 Ed. III.

³ Carew's Survey, ed. 1769, p. 8.

On the patent roll of 29 Edward I. we find the grant of the custody of the mines to Thomas de Sweneseye, and of the controullership to the Abbot of Tavistock. On the dorse of the same rolls we find commissions of oyer and terminer, to hear the complaints of miners *inter se*, as well as a commission of inquiry addressed to Reginald De Ferrariis to certify the state of these mines when the merchants of the Society of the Frescobaldi of Florence first accepted a lease of them ("receperunt ad firman").

This last document shows that the Lombard interest under the king's grant was, presumably, a sett or lease for their own benefit.

Some further observations on the terms of the indenture will be reserved for a future part of the volume, when the details of the produce of the mine will be described.

EDWARD SMIRKE.

INDENTURE UNDER WHICH THE SILVER MINES OF BYRLAND WERE WORKED TEMP. EDWARD I.

Fait a remembrer qe ordene est par le honorable pere en die Sire Gautier par la grace de dieu Evesqe de Cestre, Tresorer nostre seignor le Roy, en la presence Sire Johan de Drokenesford, gardeyn de la garde-robe le Roy, e de Mons^r Roger de Hengham, Sire William de Carleton^r Barons del Eschequer le dit nostre Seign^r le Rey e autres plusors de son Counsaill, le xxiii jour de Feverer lan du regne le Rey Edward xxix. a Nichole,⁴ qe Thomas de Sweneseye clerk au dit honorable pere seit gardeyn de la minere le Rey de Byrland en le Counte de Deveness^e, e de la minere de Alternoun en Cornewaille, e de totes les autres mineres qil porra fair serchier es parties de Deven^e ou il entendra faire le preu le Rey, sauve as marchaunz de la compaignie de Frisconb [audz] une minere qil fount quere e feront se eaux la puissent trover, la quele lour est graunte a quere et overer tut a lour custages issi qe nul ny entremette de cele minere, fors soulement les overours Lombardz qil y metteront, e autres qil purront meismes attrere en bone maniere saunz enpirement ou amenusement des overours de autres miners en Deven^e e en Cornewaille, issi qe nul de meismes les minours ne entremette des diz Lombardz ne en lour dites overaignes du cerche, ne de la minere qil cerchent, quant ele sera trovee; mes le dit gardein sache e face enrouler lissue de cele minere quant ele sera trovee, taunt qe le dit Tresorer eit entrely e les diz marchaunz la bosoigne plus pleinnement ordine. E qil ne soeffre a soen poer qe les ditz Lombardz soient desturbez, maumenez ne damagez en nul poynt; mes qe eux se portent bien e curteysement come fere deyvent, e qe en fiancee del dit poynt ne seyent ia plus outrageus ne fouhardiz. E per ceo qe les diz marchaunz ount grant de mine la en droittour a foundre e a paroverer [?] come a ceu mestier appent, la quele covendrait estre overee nettement avaunt qe autres de mine entremeissent de overer as engyns ou es molyns ou p... les oystier⁵ la endroit, est ordine qe les ditz marchauntz eyent totes les avant dites choses totes queles covient renablement a parfaire lour overaignes jusques a la Seint Mich^e procheyn avenir, issint qe denz ceau temps perfacent lour overaignes nettement, e qe qange

⁴ i. e. Lincoln.

⁵ Sic.

demoert outre ceo terme seit pleinement e proprement au Rey savez saunz contredit, e qil eyent boys en Boeland ou en Bicombe a lor fonde-souns e affinesouns fayre prise per bone gens e leal come avant ount eu. E qe le honorable home le Abbe de Tavistok seit contreroller des dites miners a sorveer e contreroller e testmoigner la myne trete la endroyt, le plum issaunt de mesme la mine les affinesouns, et l'argent issaunt des affinesouns ensemblement, et les paementz et les despenses qe hom fera en lachat de mine en totes les autres choses qil y apendent e covient per commune vewe e comun acord de eus e de leur atournez quant mestier serra. E qe par leur commun acord e commune vewe come desus est dist receivent la mine des minurs au chief de la semeyne ou de la qinzeyne, e payent pour chesenne lade de mine nettement et bien lavec v. s. si hom nel porra par aucune bone veye a meyns mettre, e pur la lade de la minere de Alternon iii. s. solom le covenant fet entre le Rey et les minours ilokes. E qe le gardeyn respoigne de qanqil yst de tote la mine trete e achatee taunt pleinement come il avera les choses issauntes reconwes⁶ des overours de chesenn mestier par taille, ausi bien en plum argent affinee come en totes autres choses ensemblement; e de deners qil avera resceu qe serront despenduz per comun acord et comun counsail, e qe totz despens et totes mises en serchs de novell miners en Devon' et en Cornewaille, e en totes autres choses ly soient allowez sour lacounte taunt pleinement come eles serront tesmoigne per le countreouller avant dit. E purceo qe aucune lade de mine rent plus, e aucune meins, ausi bien en plum come en argent issi qe nul certeyn ne peut estre mys, ne seit le dit gardein charge de nul certain de plum issaunt de la mine solom les lades, ne de certeyn de argent issaunt de plum solom le poys de plum as affinesouns, ne de certeyn de plum baraigne⁷ issaunt des cendres des affinesouns, desicome en touz ces degrez y ount diversetez de bountez, quantitez, e de response. Mes quanqe le dit gardeyn e son contreroller facent par comun assent e comun counsail e en entente de profiter por le Rey en qecunqe manere de despens, seit pleinement allowe sur lacounte au gardein avant dit. E qe tut l'argent afine et les deners receus demorgent en leur comune garde en labbeie de Tavistoke ou ailleurs en seur lieu sur bone seurure e sour le seal le gardeyn tant qe as jour de paiement; e qe donkes entre eaus preignent des deners ceo qil entendent qe peut suffire pur les paiement a cele journee. E si rien remeint, seit remis en la garde avantdite sauve acunes meimes parcelles de deners qe covient aferie qe le gardein eit par remembreance entre eus aferie a la foiz acunes porveyaunces prestz as overours quant mestier serra serchs de noveles mineres et per autres diverses bosoignes necessaries denz la semeyne, taunt qe a prochein jour de acounte au chief de la semaine ou de la qinzeyne. E qe il isoient iiii ou v affinours bons ou plus ou meins solom ceo qe hom verra qe mestier serra, e soient a gages le Rey par la semeyne ou a certain par an, solom la porcion del an qil y demorent e qe len avera de eus mester. E qe le plum qe demoert es cendres de affinesouns soit refoundu en covenable seisons, e seit gard, taunt qe le Tresorer o les Barons del Eschequer leur face a savoyer ceo qil enleverount de ceo faire. E totes foiz facent certifier le Tresorer e les Barons quant il averont bosoigne de deners, issi qe les overaignes ne preignent deffaute en nul manere. E soient avisez le Tresorer e les

⁶ Reconnes (?)

⁷ Barren, i. e., not argentiferous.

Barons qil ny eit defaunte de meryn⁸ de la minere, car il a covient qe les ditz gardeyn e le countrerouller le achate par parceles taunt qe len leit porveu en gros. E qe hom face trover as minours feures, fer, siu, cordes⁹ e totes autres choses come len soleit fere avant ces heures, sauve qe a cele de Alternoun qe est de autre condition per covenant.¹ E qe hom mette peyne de abreger des dites chose si hom peut. E qi hom face fere les avidodz² solom ceo qe hom verra qe meuz selt, ou a souz, ou attache per teises, ou on altre manere e asaier defere autres engyngs qe covenantables eient al ewo deliverer. E qe le boys de Kalistok seit assigne por le merimer⁴ de minours e des avidodz² en Byrland qe demorent en la meyn le Rey aquero par parceles qant len avera bosoigne par vewe du gardeyn, ou de son atourne sil ne peut entendre a chescun foiz pur autres bosoignes. E qe nul minur ou autre overour y entre en altre manere qe desus ne est dit, ne rien de ceo ne eient pour fouail³ ne pour altres bosoynges, sur forfeiture de qant qil porrunt forfaire au Rey. Qant as miners en Cornewaille qe sont en certains covenantes faytes entre le Rey e autres minours par le dit gardein e autres qil porra fere cerchier et trover celes parties, respoigne mesme le gardein solom les tailles qi se ferront entre ly e les overours, e par celes seit charge ou par la vewe et par la tesmoignance du Priour de Bodmine, le quel qil voudra e qil verra qe meuz¹ porra faire, qar la une veye e lautre est assez seure. E seit le plum mis en chastel de Rostormel ou aillurs en seur lyn, tant qe hom sache la volonte du Tresorer. E eit le dit gardein ses gages, ausi bien du temps de marchaunz de Friscombaudz, fermors illoques, avant la confeccion de ceste endentoure pour taunt come arere ly est, com du temps avenir, si les ditz marchaunz ne deivent par la force du covenant fait entre le Rey e eus ses gages aquiter pour lour temps.

Ceste ordinaunce fu faite a Nichole par les avaunt ditz Evesque e les autres le jour e lan avant nomez. Cest endente entre le Rey de une part e les ditz gardein e countrerollour de autre part. En tesmoignance de qen chose a la partie demoraunte devers les ditz gardein e contrerollour le Rey a fet mettre soen prive seal; e a la partie demoraunte devers le Rey eaux ount mis lour seaux. Videlicet de tribus ultimis quarteriis anni xxix. et de annis xxx. xxxi. xxxii. xxxiii. xxxiiii. et xxxv. usq. xiii. die Maii.

⁸ Merrain or marrein, *i. e.*, materiamen or mæremium. Timber.

⁹ Feures, fouarre: *i. e.*, forage, iron, grease, and cords.

¹ Throughout this document the mining covenants or customs of Devon are shown to differ from those of Cornwall.

² This word, though variously written

in other places, clearly refers to the *adits* or lateral passages underground. The adit is called also an *audit* in Carew's Cornwall, and the word still occurs in the lips of a working miner.

³ Fewel.

⁴ Meux, or mieulx (?)

Proceedings at Meetings of the Royal Archaeological Institute.

February 4, 1870.

The Very Rev. Canon Rock, D.D., in the Chair.

Col. A. LANE FOX exhibited a matchlock of the seventeenth century, and of peculiar construction, lately found at Inverness, and illustrated it by others from his collection. He remarked,—“ My object in exhibiting this matchlock is to ascertain the opinion of the archaeologists present, whether it is of European or Oriental manufacture. It was kindly added to my collection by the Rev. James Joass of Golspie. My first impression upon seeing it was that it must be oriental, from its resemblance to some of the Chinese and Japanese matchlocks in my possession. It differs, however, from any oriental arms that I have seen in the details of its construction ; the serpentine, instead of passing through the stock and out of the top behind the barrel, makes a twist in the stock and comes out on the right side immediately behind the pan, and an oblong hole is cut in the stock to allow the movement of the serpentine when pressed towards the pan ; the spring is on the outside, and presses upwards on the bent part of the serpentine, where it issues from the oblong hole in the stock ; the wire staples which fasten the spring to the stock are, no doubt, recent additions ; the barrel is 5 ft. 3 in. in length, octagonal on the outside ; the bore is $\frac{1}{2}$ in. in diameter ; the wooden shaft appears to have extended up the whole length of the barrel, but only half of it remains ; the pan had formerly a brass cover, turning upon a pivot ; the breech is secured by means of a brass band, about an inch in width ; the butt curves downwards, in the form of a Scotch pistol. In this respect it resembles some of the Japanese arms ; but the same form also occurs in the European Demi-haque of the time of Henry VIII. and Elizabeth. The form of the serpentine resembles the oriental ones, in being constructed of one piece, the match-holder moving *forward* to ignite the charge, whereas in the European matchlocks the match-holder, being provided with a trigger, was made to move backwards, in which position the operation was brought more under the eye of the firer, and he was enabled to blow his match immediately before firing. This, however, appears to have been an improved form of matchlock, those used up to the middle of the sixteenth century being constructed of one piece in the same manner as the oriental ones.¹ The position in which the

¹ Observations on the History of Hand Firing, &c., by Samuel Rush Meyrick, Esq., LL.D., F.S.A. Archaeologia, vol. xxii.

matchlock was found would lead to the inference that it may be of native manufacture. It was found in a sunk cellar, a few feet under the surface of the earthen floor in No. 15, High Street, Inverness.

"This weapon appears to be of interest as affecting the question, which I think can hardly be considered definitively settled, whether the matchlock, in its simplest and earliest form, was a European invention, or was derived from intercourse with the East. That some of the more advanced forms of oriental matchlocks are copied from European firelocks is evident; but, on the other hand, the earliest form of matchlock must probably have been used in China before it was known in Europe, and may have been communicated, like other improvements of the same period, through Arab commerce with the East."

Col. Fox then described a series of eight oriental matchlocks, showing the successive improvements from the most improved patterns. Some of these are evidently copied from the Spanish flintlock. The latest improvement exhibited consisted of a Japanese gun, in which the percussion principle was adapted to a weapon of the matchlock form.

Mr. BERNHARD SMITH remarked that he was in possession of a large, heavy matchlock, with a boss under the stock, and of about A.D. 1630, which was certainly of European make. It had the serpentine coming towards the shooter. He thought the example found at Inverness was also European, an opinion in which Mr. Hewitt concurred.

The CHAIRMAN gave an account of an embroidered chasuble found in a church at Warrington in Lancashire.—"Through the archaeological zeal and courtesy of Dr. Kendrick of Warrington, we have been favoured with the inspection of a curious piece of old English embroidery which had been the front and back part of a chasuble; and along with this Eucharistic garment came the notice of how it was brought to light. While some reparations were being made, about forty years ago, in that Lancashire parish church, a blocked-up doorway near the rood-screen was re-opened, and not only was the staircase leading upwards to the rood-loft shown, but—a thing most unusual—another flight of stairs conducting downward to a crypt was revealed, and upon one of its steps was found a carefully wrap-up parcel containing a chasuble. Not deeming this venerable old vestment serviceable for any ecclesiastical use to which he could apply it, the incumbent of the church made a present of it to the Catholic priest of the place, and he, wishing to bring it back to its olden use, put it into the hands of one of his congregation for repair, the body of the vestment being in parts much decayed. The good dame to whom this charge was committed imagining, as is the wont even yet with some ladies, that any new silk is preferable to old, took off the two orphreys from this ancient chasuble, and fixed them on a modern one of crimson satin, cut after the scanty and fiddle shape of so many fashioned vestments of these days, so unseemly to the eye of any one who knows the ample dimensions of mediæval chasubles. These embroideries are in the poorest kind of English work which marked the end of the fifteenth and the beginning of the sixteenth century, with the one redeeming quality of the excellence of their diapering or grounding, which is, in general, well worked. All the figures, and the niches within which they stand, are wrought in coloured silks, after the mode of the "opus plumarium" or feather-stitch, while the golden threads of the diapering are as bright as they looked the first day they were put in, being wound

round with pure metal, and not, as now, composed of base and copper alloy. Though quite inferior as works of fine execution, these orphreys are truly valuable, as furnishing some curious samples of symbolism and historic allusions. The cross on the back is somewhat in the Y shape, and three angels, each with a golden chalice in his hand, receive the sacred blood trickling from the hands and pierced side of our Lord upon the cross. To signify the perpetual virginity, not only of our Lord and the Blessed Virgin Mary, but also of the beloved disciple St. John, two lily plants, but with the flowers coloured pink, are shooting up, one on each side, from the ground at the foot of the cross. If the persons of Abel, Abraham, and Melchisedeck, together with two of the apostles, may be easily recognised by their emblems, to not a few spectators it may be difficult to say why that figure in armour, with a battle-axe resting on his shoulder, should be there. In my mind there cannot be a doubt that the knight we behold so shown is meant for Thomas, Earl of Lancaster, beheaded at Pontefract A.D. 1322, in the reign of Edward II.

To soothe the last hours of his dying father, Edward I., the future king swore he would banish his favourite Gaveston, not only from his presence, but altogether from the kingdom. This promise, however, he did not keep; but he heaped honours, wealth, and titles upon this overbearing foreign minion, till at last a general rebellion broke out against the wayward recklessness of the young infatuated king. Among the richest and most powerful of the barons stood Thomas Earl of Lancaster, by blood connected with the reigning house; and he was chosen to head the popular party. The struggle lasted long, and had its various phases. Beleaguered at last and taken by the court or Gaveston faction in the castle of Pontefract, Earl Thomas, after short shrift, was beheaded at the early morrow on a hill outside the walls. The kingdom mourned him as a martyr to the cause of justice and the people's cause: the spot whereon he died became at once a famous place of pilgrimage, and by the country's voice he was proclaimed a saint without waiting for the process of regular canonization. As years went by this feeling grew, and a regular service in his honour was drawn up, and it is said that, listening to his intercession, the Almighty had more than once vouchsafed to work miracles by healing the sick at his request. At Warrington there was a house of Austin friars, and in the year 1327, the then king, Edward III., issued a letter to its prior, Robert de Werrington, authorising him to gather money throughout the realm for building a chapel on the hill at Pontefract upon the spot whereon Earl Thomas was beheaded. That Prior Robert succeeded we learn from old Leland, who tells us, in his *Itinerary*, vol. v. p. 95, "without the town (of Pontfract) on the hil wher the goode Duke of Lancastre was behedded, ys a fair chirche." That the report of miracles having been wrought over the tomb of the earl seems to have annoyed Edward II. and his party is shown by a document given by Rymer (*Fœd.* vol. iii. p. 1033, A.D. 1323), "*Super rumore Thomam nuper Comitum Lancastrie miraculis corruscari*;" and the document adds, speaking in the king's name, "*quod moleste gerimus*." Quite of another way of thinking, Edward III. sent a deputation to Rome asking the Holy Father to enter on the enquiries necessary for the earl's canonization, as appears by the document—"Ad Papam, pro canonisatione Thomie nuper Comitum Lancastrie" (*Fœd.* iv. p. 268, A.D. 1327); but, though urged a second time upon the Pontiff by another deputation, no canonization took

place. Far into the days of Henry VIII. there lived in the English mind a loving and a reverent remembrance of Thomas Earl of Lancaster, and the hiding so carefully away within a concealed part of this church at Warrington of this one out of the many chasubles which must have belonged to it, speaks of the hope that other and less clouded and stormy days would dawn, when the vestment with the likeness embroidered on it of a man so loved would again be worn at its altar.

"Fortunate is it for our Institute, one great object of which is to gather within reach everything which may illustrate our national history, to be able, while exhibiting and speaking of this old chasuble, to set before our writers of history a curious and undoubted proof, for more purposes than one, of gone-by lamentable times in our native annals."

A memoir by Mr. C. W. KING, "On the Portraiture of the Ancients," was then read. It is printed in the present volume, p. 16.

Mr. YATES made some remarks in high commendation of the essay; and the CHAIRMAN referred to the legend that the earliest portrait was that of a lover going to the Trojan war, parting from his lady. He fell asleep, and she sketched his outline on the wall.

Mr. BURTT read, "Notes on a Fishery at Lapworth, Warwickshire, *temp.* Edward III.," founded on a document in the Public Record Office. This has been already printed in this Journal, vol. xxvi. p. 357.

Antiquities and Works of Art Exhibited.

By the Rev. J. FULLER RUSSELL.—A portrait on panel, by Cornelius Jansen, of a Suffolk worthy, John Meadows, M.A., rector of Ousden in that county, and the maternal grandfather's great-grandfather of the exhibitor. He was ejected from his benefice under the Act of Uniformity, in 1662. He married Sarah (*née* Fairfax) the great-granddaughter of John Fairfax, Master, in 1609, of the Hospital of S. Giles, Norwich, and the grandson of Sir Thomas Fairfax, Knt. (who deceased in 1520), of Walton and Gilling, Yorkshire, and Anne, daughter of Sir William Gascoigne, Knt., of Gawthorpe, Yorkshire, by the Lady Margaret (*née* Percy), third and youngest daughter of Henry, the third Earl of Northumberland. Mr. John Meadows' younger brother, Sir Philip Meadows, was Latin Secretary, in 1652, with Milton, to the Protector Cromwell; Ambassador to the courts of Lisbon, Sweden, and Denmark; and the great-grandfather of Charles Meadows, who assumed, in 1788, the surname and arms of *Pierrepont*, was advanced to the earldom of Manvers in 1806, and was the grandfather of the present earl. A "Memoir" of John Meadows was published, in 1840, by the late Edgar Taylor, F.S.A.; and his portrait formerly belonged to the exhibitor's uncle (the representative of the eldest branch of his descendants), the late John Fuller, Esq., of Dunmow, Essex, and is now in the possession of his daughter, Mrs. William Nash Woodham, of Shepruth, Cambridgeshire, by whose kindness it is exhibited.

By Mr. J. HENDERSON, F.S.A.—A Persian curved sword, damascened in gold. The inscriptions on the blade record the titles and attributes of Allah, and the words, "King of Iran or Persia." On the back of the blade are the names of the seven sleepers, with some cabalistic writing. The probable date is the latter part of the fifteenth century.—An Indian

curved sword, damascened with animals and birds.—An Indian mace, of Delhi work. The owner's name is on the stem; the name of the prince he served on the head of the mace, with the date of the year of the Hegira, 1136 (A.D. 1772).

By Col. LANE FOX.—A series of matchlocks, eight in number, of oriental make, exhibiting the earliest-known form of this weapon, and showing successive stages of its improvement. The stock and frame of one of these weapons was a good specimen of inlaid woodwork, exhibiting scenes of the chase, &c.

By Mr. W. J. BERNHARD SMITH.—Arms combining some characteristics of oriental and European manufacture.—A martel, of oriental character, but possibly Polish or Hungarian. The head is of brass, cased with silver, ornamented with niello and coloured blue and white pastes. The shaft is of wood, covered with leather, and partly cased with silver.—A steel pistol, of Scotch or English make, but of oriental type. The flintlock has a sliding cover to the pan, which has lost its hammer. The lock-plate is of brass, engraved. The butt is formed after the fashion of many Albanian and Turkish pistols; early seventeenth century.

By Mr. F. SPURRELL.—A small collection of flint weapons, &c., interesting examples of familiar types found in the neighbourhood of Dartford, Kent.

By Mr. N. HARE, Jun., of Liskeard.—Seal, of mixed metal, chiefly copper, said to have been found among the sand of a cavern in Mount's Bay, opposite Mount St. Michael, Cornwall. In the centre is a rudely-cut cross, with the sacred initials I. H. C. The legend appears to be VANCIEDTOL, in letters coarsely cut. The seal is circular, an inch in diameter, and has a hole through the top of the handle for suspension at the girdle; probably of the fifteenth century.—Rubbing of a granite slab in the gardens of Mrs. Pendarves, of Pendarves, Camborne, Cornwall. Letters of curious form are scarcely decipherable, and it is thought to be a "nonsense" stone.

By Dr. WAITE.—Photograph of the porch of Adel Church, Yorkshire.

By Mrs. JERVIS.—Portraits of Sir Thomas Wayte (the regicide), and Sir Thomas his son.

By the Rev. R. P. COATES.—Portion of a quern, found in the neighbourhood of Darenth, Kent. It is the upper stone, or "runner," and formed of conglomerate, the "pudding stone," usually supposed to be from Hertfordshire. Its shape is conical, or rather more than hemispherical, with a large central perforation and traces of a smaller hole at the side, probably to receive a handle. This relic lay on the borders of Southfleet parish, a district rich in Roman remains; and Mr. Coates ascribed the quern to the Roman period.

By Mr. OCTAVIUS MORGAN, M.P.—Impression of a silver signet ring, with an unusual merchant's mark; date, the latter part of the fifteenth century. The dimensions of the besil are shown by the woodcut; the device is a cross-shaft, having at the upper end two vanes or streamers, on the sinister side, so disposed as to present the appearance of a W. This, however, a frequent feature in the design of such marks, was probably not intended for a letter. It occurs in many instances amongst the numerous merchants' marks of Norwich, collected by Mr. W. Ewing (*Norfolk Archaeology*, vol. iii. p. 177). A letter, probably a minuscule N (or an U), is introduced on the dexter side of the central stem or shaft,

which passes through a series of objects, double bowed, possibly the initial B, placed transversely, and three times repeated. It will be seen by comparison with examples figured in *Norfolk Archæology*, *ut supra*,



and the *Norwich Brewers' Marks*, vol. v. p. 313, that the central stem, in many instances, springs from an initial—A—B—IB—G—M, and the like, minuscule letters being also frequently introduced in the field. These marks appear to have been in common use from about 1300 to 1600; it is supposed that they were hereditary, but subject to arbitrary variations, to distinguish individuals of a family; no established usage or rule has been ascertained in regard to letters that occur in their seemingly capricious designs, as indications of names. A specimen found near Cork, and figured in this *Journal*, vol. ii. p. 198, presents the shaft with double vane, springing from an ornament that may be an orb or mound surmounted by a cross, and placed on a letter B, transversely placed, as on Mr. Morgan's curious signet. An interesting example of lettered marks is to be seen on an escutcheon, a "palimpsest," part of a sepulchral brass found at Betchworth, Surrey;¹ in this instance the vertical stem that carries a double W fashioned streamer, is formed by the long stroke of the initial h. Several other illustrations of the varied character of these marks have been noticed in this *Journal*. The impress of a gold ring in Mr. Morgan's collection is figured in vol. xv. p. 88; the hoop bears the name—Henry Smale. In the same volume, p. 289, may be seen the singular device on a ring found at Chiswick, bearing a cruciform mark, in which the numeral 2 is three times repeated; another example of the introduction of numerals is given in vol. xii. p. 294.

By Mr. A. WILKINSON.—A portion of a map of Old London, engraved by William Morgan, 1682. It appears to be part of the map called Ogilby's Map of London, and referred to in an advertisement in the *Gazette*, No. 1775, 20-23 Nov. 1682, as follows:—"Wm. Morgan, His Majesty's Cosmographer, having finished his presents and furnished His Majesty's palaces, &c., with his Map of the Exact Survey of London, Westminster, and Southwark, and the Prospect of London and Westminster, the said Map will now be sold from forty shillings to four or five pounds as they are made up and beautified. And they that desire it may have the map without the prospect, or the prospect and ornaments without the Map, at the Author's house near the Blew Boar in Ludgate Street. And whosoever hath occasion for the draft of any Ward, Parish or Estate in London, Westminster or Southwark, may be furnished at reasonable rates by the said Wm. Morgan. Also in Ireland the said Maps are sold by Wm. Mendi at his shop in the Exchange in Dublin." Mr. Wilkinson observed that there is a copy of this map in the Guildhall Library. In the Pepysian Library at Cambridge there is an impression

¹ It is figured in *Arch. Journal*, vol. xii. p. 293; *Gent. Mag.*, N. S., vol. xliii. p. 270.

of the Prospect of London and Westminster, taken at various stations to the Southward thereof, by William Morgan, doubtless that advertised in the *Gazette*; it is noticed in Pepys' Diary, vol. iii. p. 14, edit. 1854. See Gough's Notices of Early Maps of London, Brit. Topogr., vol. i. p. 753; and the Memoir accompanying the map by Mr. W. Newton, published by Bell and Daldy, 1855.

March 4, 1870.

OCTAVIUS MORGAN, Esq., M.P., F.S.A., Vice-President, in the Chair.

A memoir was read by Mr. J. G. WALLER, entitled "Remarks on a piece of Roman Sculpture found at Sens, in France, part of the tomb of a Painter, and representing Fresco Painting." A drawing of this remarkable illustration of the process of wall-painting was exhibited by Mr. Waller. The sculpture, unfortunately much damaged, has been figured by Mr. Roach Smith in his Illustrations of Roman London, p. 61.

Mr. C. W. KING, M.A., communicated a dissertation on the portraiture of Our Lord, on emerald, presented, according to tradition, to Innocent VIII. No trace of this gem has been found in any notices or records of the Sphragistic Collections in the Vatican. Mr. King gave some notices of certain other ancient portraitures of Our Lord; he sent for examination a photograph of a painting preserved in the Isle of Man, and formerly, as stated, in the monastery of Douglas. The memoir will be given in an early number of the Journal.

The Rev. CHARLES NEVINSON, Warden of Browne's Hospital at Stamford, sent a short notice of the recent discovery there of an alms' box of somewhat unusual fashion. It is here figured, from a photograph supplied by an obliging correspondent at Stamford, Mr. Thomas Paradise. During the last year the condition of the buildings had come under the consideration of the governors, and it had been determined to reconstruct certain portions which had fallen into decay. Towards the close of the autumn the work progressed rapidly, considerable portions of the old buildings being unavoidably removed. Amongst these were the lodgings appropriated to the Warden and other members of the establishment, situated in the rear of the Hospital; the building, formerly the office of the *Stamford Chronicle*, was demolished, the site being required for the new residence for the Warden. Much of the ancient Hospital will, however, be rebuilt, stone for stone, thus retaining the decorative features of the Perpendicular style in which the buildings had been originally erected. The tower entrance, familiar to those who have visited the structure, will unavoidably be altered in order to suit the arrangement of the steps that form an approach to the new building. The works and reconstruction that the governors propose to carry out will probably require a year and a half to complete. In the meantime the old "Daniel Lambert" inn, St. Martin's, has been fitted up, and serves as a domicile for the bedesmen, who now assemble daily in St. Mary's Church for their customary attendance on divine services, until their own proper place of worship shall have been suitably renovated. During the demolition of the Warden's apartments the ancient relic under consideration was brought to light. It is a cylindrical box of maple wood, in its general form resembling a small barrel, hooped and ribbed with bands of iron; it is fitted with a lock, over which falls a hasp, with the additional

security of a second hasp, a strong iron band passing horizontally around the fore part of the box, and fastened by a staple and padlock. The upper part of the box is formed with a deep cavity, like the reversed



Alms' box of maple wood found at Brownes' Hospital, Stamford. Height $8\frac{1}{2}$ in.

conical top of an ordinary coffee-mill, and having a slit at the bottom, through which the money thrown into the cavity passed into the barrel-shaped receptacle beneath. This curious relic measures $8\frac{1}{2}$ in. in height, and $16\frac{1}{4}$ in. in circumference at the largest part.

The following particulars regarding the discovery were given by Mr. Nevinson:—"I found the alms box in a small splayed recess, in a cupboard or closet adjoining the ancient fireplace in a chamber or first-floor room of the Hospital. This chamber I imagine to have been the private apartment of the Warden. It was situated over what appeared to have been a large, though low, hall (perhaps the common living-room of the corporation), containing a very large arched and moulded fireplace and a piscina. In one corner was an inclosed staircase leading up to the chamber of which I have spoken. The fireplace in this chamber was plain chamfered and rounded, and was evidently original. The closet at the side was almost too large for a cupboard, and had been lighted by two small windows; the recess in which I found the box was in the side towards the fireplace. I see little reason to doubt that the box is coeval with the foundation of the Hospital, *circa* 1490. It seems, from the link attached to it, to have been fastened to a wall, perhaps in the chapel, whence the box, when full, would be carried by the Warden to his private apartment to be emptied; and this, perhaps, would account for its position when found. Fines inflicted on the poor of the Hospital were directed to be paid into the great chest, which still exists; this box, I should think, was designed for alms only."

Mr. BURTT observed that during a recent visit to Leicester a similar wooden receptacle for alms had been shown to him at Wyggeston's Hospital in that town. It would doubtless be produced, amongst numerous interesting local relics, for the gratification of members of the Institute attending the annual meeting of the Society to be held there during the ensuing summer.

Another example, of similar size and cylindrical form, strongly banded with iron, and attached to a chain, is to be seen at Herboldown Hospital, near Canterbury. It may have been, probably, the identical alms-stock into which Erasmus dropped his small coin when the shoe of St. Thomas was there produced to be kissed by earnest devotees, as related in his Colloquy concerning Pilgrimages for Religion's sake.

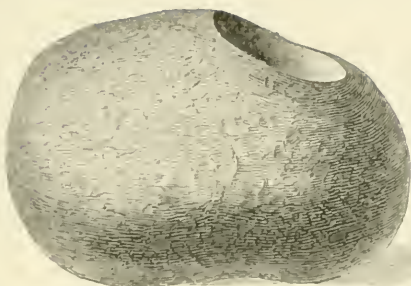
Antiquities and Works of Art Exhibited.

By the Rev. EDWIN G. JARVIS, Vicar of Hackthorn.—A celt of veined stone, not flint, and well polished, found in draining at Cold Hanworth, Lincolnshire, at a depth of about 3 ft. in clay and sand. It measures $6\frac{1}{2}$ in. in length, the breadth at the cutting edge is about $2\frac{1}{2}$ in.—Hammer-head of stone, of oval form, with a perforation for a haft. Found in Newport, Lincoln. Dimensions, $3\frac{1}{4}$ in. by $2\frac{3}{8}$ in.—A singular rudely fashioned hammer-head, of bronze, likewise found in Newport. Length $4\frac{3}{4}$ in., breadth about 2 in.; there is a narrow oblong hafting-hole, measuring about $1\frac{1}{4}$ in. by $\frac{1}{2}$ in. The extremities show signs of much percussion, and it has been suggested, with some slight probability, that it may have been the extremity of a bell-clapper. (See woodcut.)

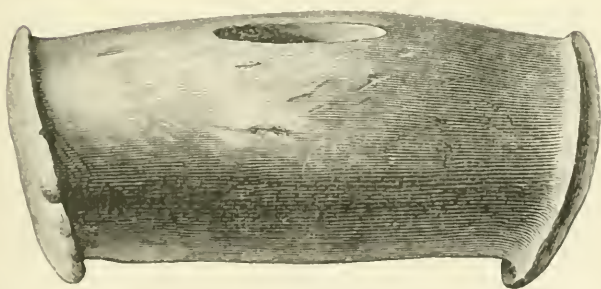
By the Hon. W. O. STANLEY, M.P.—A drawing of a metal vessel, in imperfect condition, found in November last in the parish of St. Michael Caerhays, Cornwall, near the shore. It contained 1600 Roman coins of the latter part of the third century, and of the emperors commonly designated the Thirty Tyrants. They range from Florianus, A.D. 276, to Probus, A.D. 282; of the latter there are 25 coins in very fine condition. The vessel is a *cupis*, with a handle on one side; the metal of which it is formed proves to be tin, almost pure, namely, 97 per cent., with 3 parts only of lead. In its broken state it weighs 3 lbs. 13 oz., and doubtless precisely resembled in form the vessel found in 1756 at Bossens, figured by Borlase, *Antiquities of Cornwall*, p. 317, pl. 28, and now in the Ashmolean Museum at Oxford.

By Sir THOMAS E. WINNINGTON, Bart.—A portion of an Anglo-Saxon MS. of the eleventh century; it was found in the cover of a volume in the library at Stanford Court, Worcestershire, and appears to be a fragment of the *Passion of St. Bartholomew*, translated from the "*Passio Bartholomæi*," of which the text is given in *Mombritii Vitæ Sanctorum*; Milan, *circa* 1482. Sir Thomas stated that the discovery of this literary relic existing in his library was made by Mr. Horwood, of the Inner Temple, whilst engaged on a search for the Historical MSS. Commission.

By Mr. J. G. WALLER.—A drawing representing a piece of sculpture found at Sens, the Roman *Agedincum*, and capital of the Senones; this sculpture, unfortunately mutilated, formed part of the tomb of a painter, and illustrates, in a remarkable manner, the process of wall painting, in fresco. This very interesting subject has been figured by Mr. C. Roach Smith, in his *Illustrations of Roman London*, p. 61, where a description of the details and action of the various figures may be found. Sens has supplied, on sepulchral memorials of the Roman period, sculptures of great value as illustrations of social and industrial life—the smith, the fuller, the cloth worker, and the husbandman;—these, with others, have been brought before us by Mr. Roach Smith in his *Collectanea*, vol. v. p. 160.—An Italian painting on panel, representing Christian Faith; it



Ovoid maul or hammer-head of stone, found in Newport, Lincoln. Dimensions $3\frac{1}{4}$ in. by $2\frac{3}{8}$ in.



Ancient object of bronze, found in Lincoln. Length $4\frac{1}{2}$ in., diameter about 2 in.

Antiquities of Stone and Bronze, in possession of the Rev. Edwin G. Jarvis.

was probably part of the decorations of a *cassone*. Date, early in the sixteenth century.—A processional cross, of Flemish workmanship, date fifteenth century, with paintings of the seventeenth century.

By Mr. R. G. P. MINTY.—A well executed head in terra-cotta, a specimen apparently of cinque-cento art. It was found in a garden at Petersfield, Hants, at a depth of about 6 ft. It is pierced, as supposed, for some purpose of attachment either to a figure or some other decorative work.

By Miss WICKS, through Mr. C. W. KING.—A photograph of a profile portraiture of Our Lord, on panel, stated to have been formerly in the monastery of Douglas, in the Isle of Man. It appears, from an inscription on the lower part of the painting, that this relic is one of the portraitures alleged to have been reproduced from an emerald presented by the "Great Turk" to Pope Innocent VIII. The example, however, in the Isle of Man varies in several particulars from the usual type, of which several reproductions have been noticed in this Journal. See vol. viii. p. 320 ; vol. xiv. p. 95.

By Mr. THOMAS HART.—A small painting on panel, the head in profile, to the left, and on a gilded ground. It is a well preserved copy of the portraiture of Our Lord, of the type noticed above, which seems to have been in estimation in the early part of the sixteenth century, or somewhat earlier, and to have been repeatedly copied. On the lower part of the panel is the following inscription :—" This Semilitude of ovr Sauour Christ Iesus was found in Amarat and Sent from y^e great Turke To Pope Innocent y^e 8, to Redeeme his Brother Which was Taken Prisoner By y^e Romans."

By Mr. S. DODD.—A mezzotinto engraving of the portraiture of Our Lord, of the profile type above mentioned ; it was described as taken from an ancient painting in the Bodleian Library, Oxford. The dimensions are 10 in. in height, by $7\frac{3}{8}$ in. in width ; the lettering is as follows :—" This print of Our Saviour is done from a painting in the Bodleian Library at Oxford. Printed and sold by B. W. Morrison, engraver, next y^e corner of New Broad Street, Moorfields, and Messrs. Bakewell and Parker, opposite Birchin Lane, in Cornhill."

By Mr. OCTAVIUS MORGAN, M.P., F.S.A.—An oval silver plate, measuring $2\frac{3}{4}$ in. by nearly 2 in., of slightly convex form, finely and delicately engraved with historical and allegorical devices. It is contained in an oval brass box, which appears to have been made for it, together with a small oval book consisting of several paper leaves between two outer leaves of parchment, sewn together at one end after the manner of a book, and herein is written the following description of the plate :—" The History of the upper side of the Plate. The Royal Oak cut down, & on the body of the tree falling is Jan: 30th 1648, when King Charles the 1st was beheaded—in falling the Branches break, and under them lye the Crown subverted, and the Globe and Cross broke from it. In the Crown is engraved—Charles. Near the Crown lyes the Scepter, broken into 3 pieces, intimating thereby the Destruction of the 3 Kingdoms, England, Scotland & Ireland. Over the Stock of the Tree descends an Angel with a Watering pot, on the right side of which is ingraued Job 14th, 7th, 8th, 9th v. which are these words.—There is Hopes of a Tree if it be cut down that it will sprout again, & that the tender Branches thereof will not cease : tho' the Root thereof wax old in the Earth & the Stock thereof

die in the Ground, yet thro' the scent of water it will bud & bring forth boughs like a Plant. On the Watering of the Stock are 3 shoots, one representing King Charles II., the other King James II., the third, which is highest, James III., on which shoot is a Crown inscribed June 10th. On the right side of the Plate appears another Angel, with a Scroll in one Hand in which is Ezek: 17-24—God exalteth the low Tree,—in the other Hand a Trumpet to publish the same to the world."

"The History on the under side, by Way of Answer.—King William a triumphant Conqueror dressed in Armour, crowned with Laurel, with one hand supporting the Holy Bible, & protecting the Church, with a Reference to Matthew, c. 16, v. 18—The Gates of Hell shall not prevail against it,—with the Other Hand a Sword with 3 Crowns upon it; to denote his uniting and defending the 3 Kingdoms which were represented in the broken Scepter divided and destroyed. On his right Hand is a Pile of War-Instruments belonging to him as an Heroick Victor, and a Flag of Liberty and Property, an emblem of what he fought for & came to protect. Under his feet is a Serpent representing the Devil, in the twisting of which is a warming pan open, with a face in it, & on the lid is engraved June 10th, the Pretender's Birth Day, and under the Pan lyes a Bricklayer's Trowel, which refers to the story of his being a Bricklayer's Son. Under the Head of the Serpent is the Triple Crown to represent the Pope, but the Cross is broken from its top, and a String of Beads broken by it; between these is a small Barrel, under which is engraved Nov^r 5th in Remembrance of the Gunpowder Popish Plot. Over the Head of the King are Rays of Glory from Heaven, with these words coming from them—1 Sam: 16, 12 v., Arise, anoint him, for this is he, and Nov^r 4th the day of his Birth & arrival in our Coaste."

This object is now the property of Charles J. Parkes, Esq., of Pontypool, co. Monmouth, and was found not long ago among the effects of an old lady near Bridgenorth, Salop; the house had for centuries been the residence of a family of the name of Bache, from which the lady, a relative of the present owner, was descended. No history of it is known. It was probably made towards the end of the seventeenth century.

From the delicate accuracy of the engraving, as well as from the fineness, clearness, and distinctness of the lines of the graver, especially the curved lines by which the appearance of roundness is given, as also from an examination of and comparison with his known works, there can be little doubt that it is by the hand of William Faithorne the Elder, a famous engraver of the seventeenth century; he was born 1620, and died 1691. Therefore as it was made after the arrival of King William in November, 1688, we have 1690 as the date of the work.

The subject of the upper or convex side is copied from the frontispiece of a tract by Anthony Sadler, 1660, called "The Royal Mourner," where the quotation from Job is given at length under the picture. The design has however been reversed. Of the subject on the under or concave side no engraving is known, and it is probably a conceit or composition forming an answer to that on the upper side designed by the person who had the plate engraved as a private loyal memorial for his own gratification, as it was never published, nor does anything like it appear to be known.

Mr. Morgan exhibited also three portraits in Dresden porcelain, and two medallions in ivory, portraits of George III. and Queen Charlotte; the artist is not known.

April 1, 1870.

The Very Rev. the DEAN OF WESTMINSTER, D.D., Vice-President,
in the Chair.

The proceedings of the meeting commenced with a discourse, of unusual interest, delivered by the Very Rev. CHAIRMAN, who detailed, at some length, the remarkable discovery, made a few weeks previously, of a Roman sarcophagus brought to light in lowering the north green adjacent to the north transept and porch of the Abbey Church at Westminster. No relic of Roman date had previously occurred in the vicinity. The bones of a young man, with the cranium in a perfect state, lay with the feet towards the west. Within the tomb an *arca*, bearing a well-preserved inscription to the memory of *Valerius Amandinus*. On the massive coped cover is carved a Latin cross, extending along its entire length, and supposed to mark the secondary use of this remarkable *ossuarium*, that may, as supposed, have been brought to the church to serve as a depository for some ecclesiastic or person connected with the monastery, possibly in the twelfth century. The Dean discussed very fully the points of difficulty and curious investigation associated with this the first occurrence of any trace of Roman date in the "Isle of Thorns," where, however, according to monastic traditions, had stood a temple of Apollo destroyed by an earthquake. The Dean concluded an address, that was received with most lively interest, with the welcome assurance of his wish to submit to the Institute, in their Journal, a detailed memoir on so important a discovery.

Mr. OCTAVIUS MORGAN, M.P., desired to convey to the Dean, in the most cordial manner, the grateful acknowledgment of the Institute for making known a discovery surpassing in interest, perhaps, any recent notices of vestiges of Roman times in Britain. He adverted, briefly, to his own researches on a Roman centre of occupation in the county where he resided, and to the singular but uninscribed sarcophagus that he had brought to light in Monmouthshire, as described in the Journal of the Institute.² That discovery, it would be remembered, had been accompanied by certain peculiar features in regard to the funereal usages of the Romans; but it was comparatively of inferior interest to the archaeologist when viewed in reference to the inscribed memorial of so much higher a class, the details of which had now, by the Dean's kindness, been made known to them.

The Hon. W. OWEN STANLEY, M.P., gave an account of the continuation of his investigations among the "Cyttian" or pit dwellings of the early inhabitants of the Isle of Anglesey during the past year. His discourse was illustrated by stone implements, urns, and other objects, found during the course of the investigations. The memoir, illustrated by drawings of the most important of these objects, will be given in an early number of the Journal. (See vol. xxvi. p. 301, for an account of Mr. Stanley's previous researches in the same locality.)

Antiquities and Works of Art Exhibited.

By the Hon. W. O. STANLEY, M.P.—Implements of stone, urns, and other relics, found in excavations made at Ty Mawr, Pen y Bone, &c., in Holyhead Island, during the autumn of 1869.

By Mr. A. G. GEOGHEGAN.—A bronze sword, dug up at Carndonagh,

² See Mr. Morgan's description of a Roman tomb found at Caerwent, Arch. Journ., vol. xii. p. 76; and Archaeologia, vol. 36, p. 418.

co. Donegal.—Sepulchral urns found at Strabane, co. Tyrone; and a keg of “Bog Butter,” found at a depth of 10 feet below the surface, at Dungiren, co. Londonderry. Full notices of the substance called “mineral tallow,” or “bog butter,” found in the peat in various parts of Ireland, and supposed to have been buried for safety, or to give it a peculiar taste and consistence, have been given by Sir W. R. Wilde, in the Proceedings R. I. Academy, vol. vi. p. 369, and in his Catalogue of the Museum of the Academy, p. 267, where also (at p. 212) is figured a remarkable specimen preserved in that collection. The butter was deposited in a wooden vessel, formed of one piece, and somewhat resembling “methers” or long firkins. The vessel in the Academy’s Museum (above cited) is of willow, and measures 26 inches in height and 32 inches in girth. This curious substance has likewise been found in Scotland, and in the Farøe Isles.

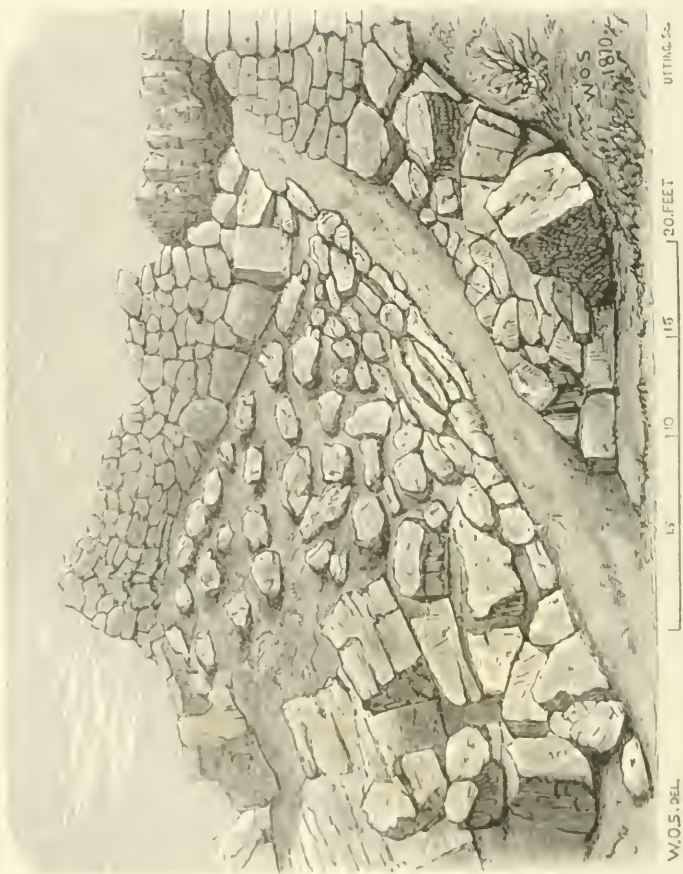
By Mr. WESTLAKE, through the Rev. J. FULLER RUSSELL, F.S.A.—Painted glass, the lower portion of a “Jesse” window, from Margaretting Church, Essex. It was noticed as an example of a character of design, that occurs in many windows of similar style in that county. Two figures, of spirited design, and in very elaborate costume, are introduced in each circular compartment or medallion formed by the trailing stem of the vine. The date appears to be the earlier part of the fifteenth century. Some valuable observations on examples of the “Stem of Jesse,” so much in vogue in the painted glass of all periods of mediæval art, may be found in Mr. Winston’s Memoirs on Glass Painting, pp. 108, 109, 238, &c. The window at Margaretting consists of three lights, but much of the glass had been destroyed; it has been replaced and restored with much care.

By Mr. H. F. HOLT.—The jewel and toilet-case of Dorothea, youngest daughter of Philip, Duke of Holstein Glücksburg, and Sophia Hedewig, of Saxe Lawenburg, presented to her on her marriage, in 1668, by her husband, Frederick William the Great, Elector of Brandenburg. The casket is of ivory, with gilt metal engraved mountings, and contains a secret drawer, &c. It is elaborately painted with the armorial bearings of the bride and bridegroom. Amongst the ornaments are introduced animals, birds, flowers, foliage, and scroll-work; and, apart from its claim to attention as a historical relic, it presents an interesting as well as uncommon specimen of Venetian work of the seventeenth century. The toilet-case is surmounted by that for jewels; the dimensions of the former are as follows:— $13\frac{1}{2}$ in. in length, 6 in. in width, $2\frac{1}{2}$ in. in depth; the latter measures 8 in. in length, $3\frac{3}{8}$ in. in height, and 4 in. in width.

Amongst presents to the library of the Institute during the previous month, for which the customary thanks were voted to the donors, the first part of the “Lapidarium Septentrionale,”—a Description of the Monuments of Roman Rule in the North of England,—published by the Society of Antiquaries of Newcastle-upon-Tyne, was received through the learned editor, the Rev. Dr. Collingwood Bruce. This important work, originated by the generous patron of archaeological and historical research, Algernon, fourth Duke of Northumberland, by whom the chief portion of the illustrations were contributed, will consist of three fasciculi, of which the first, now completed, comprises the inscriptions and sculptures of the stations, *per lineam valli*, from Wallsend to *Cilurnum* (Chester). The continuation is in forward progress.¹

¹ The “Lapidarium” may be obtained from Mr. Reid, at Newcastle; or from the Secretary of the Society. Price, to non members, 1*l.* 1*s.* each part; small folio.





W.O.S. DEL. 5 10 15 20 FEET UTTING 25
 Corry Twp. Ancient encampment on Holyhead Mountain. Entrance from Holyhead. Facing the East.
 From a drawing by the Hon. William Owen Stanley, M.P., F.S.A.

The Archaeological Journal.

SEPTEMBER, 1870.

RECENT EXCAVATIONS AT TY MAWR, PEN Y BONG, TWR
AND MYNYDD GOF DU IN HOLYHEAD ISLAND, WITH NOTICES
OF ANCIENT RELICS FOUND AT CERRIG DDEWI, AND AT
OLD GEIR, IN ANGLESEY.

By the Hon. WILLIAM OWEN STANLEY, M.P., F.S.A.

ARCHAEOLOGICAL research has until recent times for the most part been directed to the examination of tumuli and the early interments of those successive races who have occupied the British Islands, or to the exploration of the ancient camps which abound on our coasts or in the hill country. The numerous vestiges of habitations, which to the eye of the observer presented only the appearance of a raised mound covered with the short sward of our extensive plains, or the heathery turf, have been passed by without particular notice, although the circular huts so common in Wales were specially mentioned by Camden and our own learned and native historians, Rowlands and Pennant. Cultivation has most probably destroyed all traces of habitations in the rich midland counties of England, and perhaps, as we may suppose that timber was plentiful and at hand, the huts there were built of logs, which have decayed ages ago. In the open chalk downs pit-dwellings abound, and the greatest interest at the present time attaches to the recent discoveries by Mr. E. Stevens and others at Fisherton, near Salisbury. Sir R. Colt Hoare has described those in Wilts and Somersetshire. In Devonshire and Cornwall the rains and storms that sweep over the bleak and exposed moors have destroyed the inner earthen walls of the greatest number of the circular huts, leaving only the upright granite stones, which formed the outer circle. Still, however, in the sheltered valleys many of the huts must remain untouched, which would well repay

the trouble of examination. Sir Gardner Wilkinson and Mr. Ormerod have done a great deal, but for the sake of comparison with our Welsh *cyttiau*, I would express a hope that further excavations may be undertaken. The circular form of hut is almost universal in England and Wales, but when we pass the borders of Scotland and approach the far North, subterraneous dwellings of a different form, with small chambers opening out from the central space, or built in the thickness of the walls, are common. The entrance to these habitations is frequently by a long, narrow, and low gallery, contracted in places. The reason for this peculiar structure may probably have been to protect the inmates from the cold winter blast, for at the present time the Esquimaux and the Iclander construct their habitations in this manner.

The very general interchange of local publications on archæological research between English and foreign societies has been productive of the greatest benefit; as an instance, Mr. Burt, our intelligent Secretary of the Archæological Institute, when on a visit last year to a friend, Mons. Le Men, at Quimper, in Brittany, having a copy of my memoir on the Ty Mawr huts near Holyhead, gave it to his friend, who, on reading it, recollected having seen similar remains in his neighbourhood. They proceeded at once to investigate them, and the result has been most satisfactory, bringing to our notice many stone implements, agreeing exactly with those found at Ty Mawr. We may, I am informed, expect shortly full accounts of the extraordinary *oppida*, as they are called, or hill fortifications, of the west of France, with vitrified walls of defence, enclosing large villages of huts, only differing from those in this country in being square instead of circular. An account of one of the most remarkable examples, Castel Coz, has been lately given by M. Le Men in the *Archæologia Cambrensis* (vol. i., fourth series, p. 286).

The valuable information about the lake dwellings of Switzerland by Dr. Keller, and the caves of the south of France by Mr. Edouard Lartet and others, has brought before us the manners and habits of life of those who dwelt in them, and there can be no doubt that further careful research in such habitations as still remain in our own country would supply us with much information that we require as to the early races who inhabited these Isles previous to and at the time of the Roman occupation.

It is with a view to assist those who are interested in these matters that I hope to give hereafter to the public in a more connected form the results of the excavations carefully made under my own eye, during several years, of the cyttiau or huts so abundant in Holyhead Island.

The extent of these habitations proves how thickly the immediate locality was inhabited in early times, and if we seek for the cause, we may perhaps attribute the selection of this spot to the difficulty of providing food at all seasons of the year in the interior of Anglesey, or to the thick woods and boggy nature of the country. At Holyhead the natural food for primeval man abounded : fish of all kinds, the bones of which were pounded to make food, as Mr. Anderson, Curator of the Museum of Antiquities in Edinburgh, mentions as being common in the Western Islands ; shell-fish, the shells of which are seen in the huts ; sea-weed or laver ; the numerous sea-birds and their eggs ; the larger animals, red deer, goats, hares, &c. ; these, with roots, including those of fern (*Pteris aquilina*), which we find were used for food, would support man before grain was sown and cultivated as store for winter use.

The several clusters of huts or villages in Anglesey, the remains of which are to be seen, and most of which I have explored, are, first, those at Ty Mawr ; and some idea may be given of the extent of this settlement when we consider that the whole slope of the mountain as seen in the map given in my former memoir was covered with huts seventy years ago.¹ Joining on to this settlement, we find the huts and rectangular foundations at Pen y Bone, which, from the pottery and querns of Roman form found there, must have been inhabited by Romans, and at Twr the Roman fibula found there may be also evidence of Roman occupation. Pen y Bone and Twr are slightly elevated above the bog. A little distance to the south and west we found hut remains at Plas and Mynydd Gôf Du. In all these the stone implements were nearly the same, and these sites must have been inhabited at the same early period. In no other part of Anglesey that I know of are the cyttiau so numerous, and in many places they are only found within the hill camps or fortifications, as at Llugwy, Porthamel, Llancugrad, Tynsylwy, and Caer Leb.

¹ Arch. Journal, vol. xxiv. p. 229.

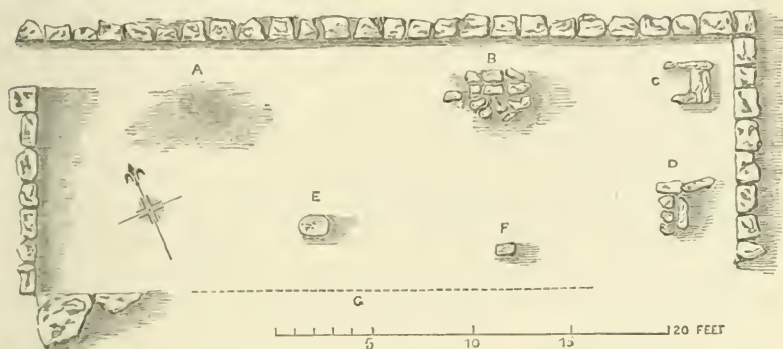
These villages had apparently a rude kind of defence by a wall surrounding them. The walls of the huts are constructed generally of a double row of upright stones fixed in the ground, and smaller stones with earth built between them; a similar mode of construction is found in France, at Castel Coz, near Brest. The settlements appear to have been connected by a line of signal hills, from which, by smoke in the day, and fire at night, any danger threatening might be made known. The most remarkable signal hills are at Capel Llochwyd and Ynys Ben Las, in the Penrhos river, near the Lyrad cluster of huts, about five miles distant from each other, but a depression in the formation of the land makes them easily seen from each other. They are both placed on conical rocks, at the top of which there is a cairn of small stones, slightly concave, or with a slightly raised outward ridge, which may have been to contain the fuel, gorse, fern, or heath, and to prevent too fierce an action of the wind upon the fire. At Capel Llochwyd, near the foundations of the old chapel, and under this conical signal rock, are the foundations of three circular huts, either to house the watchers for the signal fire, or in later times for the attendant of the chapel. A half-florin of Edward III. was found in the ruins a few years ago.

These fire-signals were common, and extended, no doubt, all round the coast from Chester to Anglesey, and so on to the south of Wales and Cornwall. Sir Gardner Wilkinson mentions these coast defences in Ireland. Dr. Petrie considers that the round towers in later times might have been used for the same purpose.

I have already² given a full description of the objects found in excavating the huts at Ty Mawr, and a great number of engravings of the stone relics found in them. It can only be by a careful examination of these and of their probable uses, comparing them with similar implements of stone found elsewhere, that any one can pretend to form an opinion as to the period at which these huts were first inhabited, or the occupation of the inmates, if only industrial, and if the stone objects were only used for the production of food; or if, taking notice of other peculiarities in the fire-places and the substances found, some metallurgical operations were carried on either by the natives, or by the Romans employing the inhabitants.

² Arch. Journal, vol. xvi. p. 301.

I will not repeat my former description of the first discovered huts, but since the publication of the two former memoirs, I have continued excavations at Pen y Bone and Twr. At Pen y Bone a rectangular building has been cleared out, measuring 36 ft. by 15 ft. internal measure, a ground plan of which is given here. The remains of three fire-places were found, constructed in the same manner as those described at Ty Mawr in my second memoir (Arch. Journ. vol. xxvi. p. 301), but there was a greater quantity of charcoal, scoria and burnt clay ; round the centre fire-place



Ground-plan of foundations of a building at Pen y Bone, near Ty Adda and Ty Efa, and marked D, in the plan (Arch. Journ., vol. xxvi. p. 307). When excavated the form proved to be rectangular, not round as there shown. A. Scoria and charcoal. B. Large hearth, scoria, charcoal, vitrified pipe, &c. C, D. Fire-places. E. Large grinding-stone. F. Small grinding stone, muller, &c., colored red.

were the singular bottle-shaped lumps of burnt clay, surrounding a pipe of highly vitrified matter (see plate IV. figs. 1, 2) ; quantities of broken pieces of pottery of three kinds were also found here, all which Mr. Franks considers to be Roman or Roman-British ware, a coarse white pottery used for *mortaria*, and by some supposed to be made in Shropshire, while others think they were imported from Gaul. These pieces were portions of the upper rim of a large vessel from the curve, about 18 in. diameter ; two pieces had been joined together by an iron rivet, which would denote that the vessel was valuable ; the other kinds were common Samian, and a richer kind with a red polished surface. Excavated from the floor of this building was a quartzite grinding stone much worn by friction and deeply tinged with red, such as would be produced by grinding hæmatite of iron (plate V. fig. 4) ; fragments of circular grinding stones were found near it, also tinged in the same way with

red ; this may have been from grinding hæmatite of iron for body-paint, or perhaps for smelting with greater facility.³ A great heap of shells, oysters, perriwinkles, and limpets, like a kjökkenmodding, was found outside.

We know that the Romans when they invaded Britain found the natives acquainted with the working of iron. In the *Sussex Archaeological Collections*, vol. ii. p. 170, we read, "Dr. Mantell the distinguished geologist remarks, it is an interesting fact that all our principal iron works obtained their metal from the ferruginous clays and sands of the Wealden—in other words, from iron produced by vegetable and animal decomposition in the bed or delta of a mighty river which flowed through countries inhabited by the iguanodon and other reptiles—a kind of bog ironrag, composed of clay, gravel, and perhaps 25 or 30 per cent. of oxide of iron ; this manufacture dates back to the time of the Romans. In all these huts there are indications of iron in slag. I have before stated that an iron formation is contained in a fault near the spot. The Rev. W. Wynn Williams has forwarded to me specimens of iron cinders

or slag identical in appearance ; these were found in cyttiau at Llangeinwen, on the other side of Anglesey.

Excavations have also been made at Twr, about a quarter of a mile east from Pen y Bone, on the side of the bog, but slightly above it. The tenant, on removing a heap of stones and earth covered with gorse, found the remains of foundations, some square, others round. These were excavated with care, and a little below the surface we came to a flat stone about 3 ft. in diameter, hollow underneath, and on removing the earth we found it to be a stone table or flat slab unhewn, supported by



three square stones about a foot high above the level of the floor of the hut, which was sunk about 5 in. (Plate VII.

³ See No. 1 specimen, described by Professor Ramsay, found in the huts at Ty Mawr, *Arch. Journ.* vol. xxvi. p. 310. It was also analysed by Mr. J. Williams,

of the Assay Office, Mona Mine, Amlwch, Anglesey, who found it to be iron ore, containing about 20 per cent. of iron.

fig. 1.) Close by was a single block of stone of the same size set up apparently for a seat (fig. 2). There was also a flat stone 2 ft. long, placed upright, with the top chamfered off; it had the appearance of a grave-stone. (Plate VIII. fig. 1.) Near to these was a drain about 34 ft. long, constructed of rude slabs of schist placed in the form of a V with the bottom cut off; one of the upper covering-stones was drilled through with a round hole about 3 in. in diameter. (Plate VII. fig. 3.) Much ferruginous ochre was found in the drain, probably the deposit from the soil, which is greatly impregnated with iron. A flat rubbing-stone, with a smaller one on the top, was found close by; it was smoothly polished by friction, and the upper stone was left as when last used.

The stone mortar (plate VIII. fig. 2) was found in this hut, together with the bow of a Roman fibula in bronze (*ib.* fig. 3); the drain-like channel did not appear as if intended to take water away, as it was on a level, and considerably above the level of the ground near.

I have read that similar drains were supposed to have been used for ventilation in the close habitations of early times; this might explain the round hole, which would admit air into the hut.

Having mentioned the probability of paint having been manufactured, I will quote from Mr. George Petrie of Kirkwall, in his notice of Ruins of Ancient Dwellings in the Bay of Skaill in Orkney (Proceedings, Society Ant. Scot., vol. vii. p. 210), where he gives the following facts relating to the discovery of pigment. He mentions, amongst various relics, stone cups, perforated and spherical objects, and that one of the cups when found contained a mass of white clay or pigment which had apparently been kneaded; and on a level and near to it was another stone cup or small vessel of clay, in which was a lump of similar clay or pigment, which had apparently been rubbed down, about half a foot square; a small piece of red pigment lay in another place, and a still larger mass, resembling a brick in form, was also discovered in the ruins. He found a piece of blue-coloured pigment in a kitchen midden in Westray, also with stone and bone implements exactly resembling those found at Skaill, and on two other occasions he found blue and red pigments. The red pigment, Mr. Petrie observes in a note, has probably been obtained from hæmatite of iron, as several pieces of

ore were found in the ruins, a portion of which was analysed by Professor Ald, Royal Arsenal, Woolwich, who stated that he found it to be siliceous hæmatite with traces of cobalt.

In the work by Mr. E. T. Stevens entitled "Flint Chips," p. 169, it is stated that hæmatite was found in the Swiss lake dwellings at Robenhausen, probably used as paint, and a similar substance had also been found among the remains of the cave dwellers and Ohio Indians in the mounds. At Mynydd Gŏf Du, on Penrhos Feilw, amidst the remains of a cluster of huts almost obliterated by the culture of the land, numerous stone mortars of large size, pounding stones, and saddle-querns were found, many of which were built into the walls. The old tenant remembers that his grandfather said that many of these huts were breast-high in his time, and one was repaired and occupied by a family. This must have been more than a hundred years ago.

In these researches we are unfolding the pages of ancient evidence as regards the habits of the inhabitants of Anglesey, which have for so many ages been hidden in the earth, but now reveal themselves for our instruction.

I might speculate at great length on these topics, but having, as I believe, nearly exhausted all our means for obtaining further information, I submit the account of all our discoveries at the cyttiau at and about Ty Mawr to the public, so that each archæologist may form his own conclusions, and, I hope, be incited to follow out further inquiries into any similar remains in his neighbourhood.

SEPULCHRAL URNS AND CELTS FROM CERRIG Y DDEWI, LLANGWYLLOG, AND STONE QUERNS, &C., FROM GEIR, IN THE PARISH OF LLECHGWYNFARWYDD, ANGLESEY.

In the parish of Llangwyllog, near Llangefni, in Anglesey, on a farm belonging to Sir R. Bulkeley, Bart., called Cerrig y Ddewi, or Druidical Stones, several sepulchral urns and celts were found by labourers when levelling some mounds of earth. Cerrig y Ddewi stands on rising ground above the small river Cefni; a few mounds slightly raised above the level of the field still remain to be seen, with the ends of large stones, which may have formed the cist; and there is little doubt that if these mounds were carefully examined, urn burial would be found beneath. In a field near to Bodffor three large stones, forming a triangle, are still standing;

and it is said that many similar stones have been removed in late years from other fields near. A few years ago the Central Anglesey Railway was made, which passes near Cerrigy Ddewi, when several urns were reported to have been broken up by the workmen employed.

About twenty years ago, Mr. H. Pritchard, of Trescanen, rescued the urns and celts here described from the same fate, and it is to his kindness that I obtained them for the purpose of being engraved; they are now deposited by me in the British Museum.

The larger urn (plate IX. fig. 1) is a fine specimen of the sort usually found in Wales; it was much damaged, and filled with burnt bones and earth. The smaller one (fig. 2) contained no bones; it is of a peculiar shape, like the nave of a wheel, made of coarser clay than the other, of a bright red-coloured paste, probably the clay of the locality. There are seven small round perforations around the middle of the little vessel. The under side is slightly hollow. This is one of the curiously perforated cups hitherto called "Incense Cups." This has for a long time appeared to me a misnomer, and that they might more likely have been used for the purpose of holding fire, always ready at hand for use, either hung up in the hut, or to be carried on hunting excursions when away from home, the damp and rainy nature of our climate making it more tedious to obtain fire by friction, as is the custom of the natives in hot parts of the world where rain is hardly known. These perforated cups, sometimes with long slits at the side, or round holes, even at the bottom of the vessel, from their make would facilitate the admission of air, and thus serve to keep alive the glowing embers of charcoal or the smouldering fire in fungus, rotten wood, amadou, or moss. The current of air might easily be modified, if too brisk when in motion, by placing the lighted substance in an outer coating of moss, slightly damped, or fibrous bark of a tree. The North American Indians are said to carry their fire in this way when on the war track or hunting expedition; and the Australian savage has his fire-stick to prevent the delay and trouble of making fresh fire at every halt.

Mr. Albert Way, to whom I first mentioned this possible use of these so-called "Incense Cups," and with whom I have frequently discussed the subject, suggests that they are too

small for the purpose of holding fire or embers ; but I do not see that this is any real objection, as fresh fuel could be easily carried and added when required. He also, I am well aware, is of the opinion that all cinerary urns found in the British Islands were only vessels for ordinary domestic use applied to the purpose of burial, and that none were ever made purposely for sepulchral rites. I agree with him to a certain extent, but not entirely. True, we find in Asia Minor the great oil-jars or wine amphoræ used for burials, two or more skeletons being found in the same jar ; but, on the other hand, the Greek, Sicilian, and Etruscan vases or funeral urns are adorned with figures and emblems connected with the pomps and ceremonies of death and burial. There is also a peculiar style of ornament in all our sepulchral urns which suggests the idea that they were expressly formed for this purpose. Mr. Way certainly seems to favour my view in his remarks on "Incense Cups." (*Arch. Journ.*, vol. xxiv. p. 13.) Nothing that is suggested by him is without value, and his extensive knowledge and experience on all these matters is not lightly to be disputed. I have, however, introduced these few remarks in this paper, to induce others to give their attention to these peculiar perforated cups, which I believe are rarely, if ever, found out of Great Britain and Ireland.

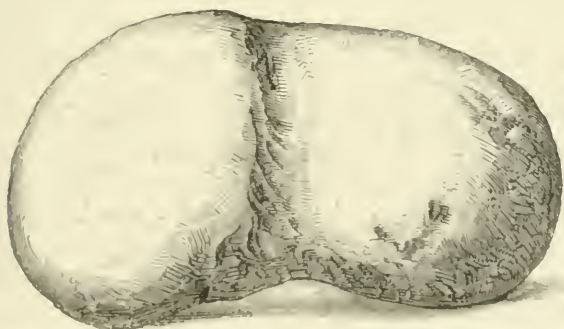
If, as is here supposed, these cups were used to contain fire for the purpose of incrimation, and were perhaps placed on the breast of the corpse when conveyed to the place of interment, selected usually by the side of a stream or remote spot by the sea side, together with the wood or other combustible matter for burning the body, it would be natural to deposit the little fire vessel in the same grave with the ashes of the dead, just as we find frequently a bronze pin or small knife, or, as at Tomen y Mur,⁴ a wooden needle, all which may have served to tie up the selected bones from the funeral pyre in a cloth, and cut the string that bound them ; everything connected with the burial would become sacred, and be deposited in the urn holding the bones, whilst the drinking-cup, weapons, or ornaments used by the deceased would be placed outside the urn, but in the same grave.

⁴ Figure 1 *Arch. Journ.*, vol. xxiv. p. 17.

The stone celts and bronze palstave (plate X. fig. 3), with a whorl or button, were found near the urns; it has been impossible to collect evidence whether they were found in the same tumulus or not. The stone celts are not common in Anglesey; and the stone of which these are made does not appear to be known in the island. I have one similar to the small specimen; it was found near Holyhead, at Ty Du, with a circular stone or disc, such as are frequently found with Celtic antiquities, and are supposed to have been used as quoits.

OLD GEIR, OR GEIRN.

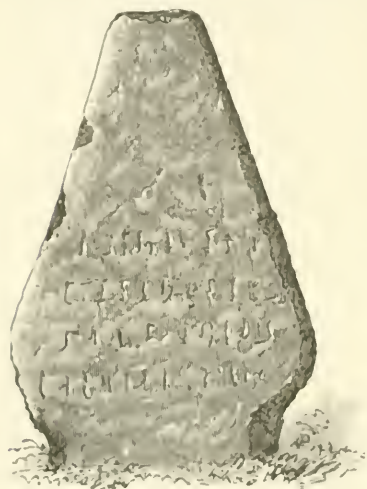
This is a commanding position, about the centre of the island of Anglesey, an ancient camp, as the name denotes, situated in Llechgwynfarwydd parish. There are remains of hut circles and mounds of earth. While cultivating the land many stone hammers, querns, and round grinding-stones have been found. Owing to the kindness of Miss Jones and Dr. Walthew, joint owners of the farm, I have obtained permission to exhibit and have the stones found there engraved. The round rubbing-stones (plate XI. figs. 2, 3), and a quern (fig. 1), of a very shallow fashion, were found together, and probably the round stones were used for bruising some substance in the quern. The others, stones notched round the centre, show no sign of having been used as hammers for pounding, and I should think might have been



Hammer-stone, or weight (?), found at Geir, Anglesey. Length $5\frac{1}{2}$ inches.

used as weights for weaving or stretching cords of sinew or skin. I do not believe that they were weights for fishing, as has been thought probable. (See plate XI. figs. 4, 5.)

On a farm adjoining Tyn Rosydd, belonging to Mr. H. Pritchard, of Trescawen, there was an upright stone with a Latin inscription. First it was placed in a field as a rubbing-stone for cattle, a common custom in Anglesey; it was then removed as a gate-post to the entrance of the farm-yard, and much mutilated and the letters obliterated; but some words are said to be,—“Et disciplina moribus et sapientia.” On



Inscribed stone, Tyn Rosydd.

examining the stone carefully and its peculiar shape, like the lid of a modern coffin, I fancied that the original stone had been worked into this shape for a later interment, and that the first inscription had been interfered with, as some letters at the edge of the stone seemed to have been cut in half; there is also a rude inscription on the side of the stone, at the upper end:—*AVROE . APIDIBI*. The spot in which it was found is not far from Presaddfedd, supposed to have been a Roman *praesidium*, according to

Rowlands (*Mona Antiqua*, p. 107). May not this inscription have been to the memory of some able Roman governor, who, by his careful discipline as to the manners of the people, and his wise rule, made himself of note in this remote part of Roman dominion?

It must be observed that all the huts excavated since 1862 differ entirely as to their interior divisions and internal arrangements. The first hut excavated by Mr. Albert Way and myself in 1862, and described in the first published memoir, contained a fire-place distinctly formed of upright flat stones about 2 feet high, the fire-place being filled with round and flat stones, all bearing the appearance of having been heated in the fire, either for the purpose of baking food upon them, or boiling water in skin or other receptacle. The hut was divided by upright slabs into two compartments. The stone implements found were of grit stone, and were considered to have been corn-grinders; the re-

mains of shell-fish, such as are usually eaten to this day, were found in a heap. In all the huts excavated since 1862 the fire-places are essentially different, being constructed of large stones generally in the centre of the hut, with smaller fire-places formed at the side of the centre one or in the side of the hut, in some instances with a well-formed chimney in the thickness of the hut walls. The rude stone pounders or mullers, the mortars or basins, and heavy flat stones set in the floor of the hut for grinding or breaking stone or some hard material, present no appearance of having been used for preparing food. The stone implements are all of the rudest kind,—sea-worn pebbles selected for their form, and, in many instances, worked possibly by hand to make them more suitable for the purpose required. The very coarse pottery found in the Ty Mawr huts could not, I think, have stood the heat of fire placed beneath the vessels, but might have been used to hold water, to be heated with stones. Their appearance is exactly similar to that of the coarse pottery I saw from Fisherton, near Salisbury, at the Blackmore Museum, which Mr. Stevens pointed out to me, the interior surface being also coated with carbonaceous matter.

Since the foregoing memoir was written a fresh settlement has been discovered near to that of Plas. As far as can now be made out the building was rectangular, like the last one excavated at Pen y Bone. The walls remaining were formed of stones about 3 feet long, set upright, with the face of the stone turned outside; but every fourth or fifth stone was placed edgeways, as a binding stone. The stone mortars and pounding stones brought to light on this site were of very large dimensions; and amongst them was a relic of metal that appeared like the socket end of a bronze celt, weighing about one pound; this rough fragment is much corroded; the implement seemed to have had the side loop, and must have been unusually large when perfect. One of the mortars discovered here measured 16 inches in diameter; near it was a circular stone cover, worked into a round form out of a thin slab, about an inch in thickness, and which precisely fitted as a lid to the mortar. A considerable number of the perforated stone buttons or whorls were found about the neighbourhood.

NOTICES OF THE REMAINS, IMPLEMENTS OF STONE, ETC.,
FIGURED IN THE ACCOMPANYING WOODCUTS.

PLATE I.—Ty Mawr.

Elevation and ground-plan of part of one of the cyttian excavated in 1868, showing the fashion of the fire-place, also the position of a stone mortar and grinding-stone found near it. Compare the ground-plan of this circular habitation, No. 3, *Archaeol. Journal*, vol. xxvi. pp. 304, 319.

PLATE II.—Ty Mawr.

Fig. 1. Oblong quern, or mortar, with a cylindrical grinding-stone, or muller, found within it, and formed with a central cavity on each side of the cylinder, possibly to give the thumb and forefinger a better hold in grinding. Compare a similar appliance, *Archaeol. Journal*, vol. xxiv. p. 247. Another, identical in fashion, has been found by M. Le Men, in excavations at Castel Coz, near Brest, Brittany. See his *Memoir, Archaeologia Cambr.*, fourth series, vol. i. p. 202.

Fig. 2. Small stone mortar or cup, possibly for use as a lamp, in like manner as little vessels found in the Hebrides. Breadth, 3 in.

Fig. 3. A shore-pebble, suited for use as a polisher.

Fig. 4. A large, ponderous shore pebble of quartz, suited by its form to be used as a pounding-stone, but possibly shaped in some degree artificially. The weight is 10lbs. Compare other relics of this description, *Archaeol. Journal*, vol. xxvi. p. 320.

PLATE III.—Ty Mawr, and Mynydd Gŵf Du, near Pen y Bone.

Fig. 1. Whetstone and hand-hammer of peculiar fashion, found near the spot where the bronze celts, spear heads, &c., were discovered in 1832. See *Archaeol. Journal*, vol. xxiv. p. 253. Sharpening stones with grooves, caused by friction of certain edged tools, had previously occurred, and are figured *ibid.*, vol. xxvi. p. 321. Probably a conveniently portable implement used in journeys.

Fig. 2. Whorl or button (?). It has several slight grooves or scratches radiating from the central perforation, caused possibly by the pin of bone or metal that may have served as fastening. See notices of objects of this description, *Archaeol. Journal*, vol. xxiv. p. 249.

Fig. 3. Saddle-quern, or corn crusher, with part of the rubber, of trap or basaltic rock. Compare other examples, described *Archaeol. Journal*, vol. xxiv. p. 245. Found at Mynydd Gŵf Du. Similar saddle-querns were found in the *oppidum* of Castel Coz, in Brittany, by M. R. F. Le Men, *Arch. Cambr.*, fourth series, vol. i. p. 292, fig. 1.

Fig. 4. Sections of large mortars, of trap rock; many of various sizes were found. From Mynydd Gŵf Du. The larger of the two here figured measures about 24 in. in breadth; diameter of the cavity about 10 in. The section appears to show that these mortars were used with peculiar pestles of somewhat pointed form, and possibly like those noticed, *Archaeol. Journal*, vol. xxiv. p. 252. A large mortar of granite, the cavity of which is of the same fashion, found at Trevenegue Cave,

St. Hilary, Cornwall, is figured in Mr. Blight's Account of the exploration, p. 10. These objects appear obviously suited for crushing, rather than grinding some kind of food.

PLATE IV.—Pen y Bone.

Figs. 1, 2. Fragments of a pipe of vitrified matter, surrounded by an irregular encrustation of slightly-burnt clay. The two portions here figured measure together about 8 in. in length. They were found under or near the central fire-place in the ruined building of oblong form, at Pen y Bone, of which a ground-plan is given at p. 151.

Fig. 3. Portion of a stone muller, which in its perfect state may have measured about 8½ in. in length.

Fig. 4. Heart-shaped pebble from the shore, suited for certain pounding processes. Several other implements of this description have occurred, selected, doubtless, on account of their form, which appeared suited for various uses. Compare these figured in a previous memoir on the relics found in hut-circles in Holyhead Island, *Archæol. Journal*, vol. xxvi. figs. 7, 8, 9, p. 320.

PLATE V.—Pen y Bone.

Fig. 1. Hammer-stone, or weight (?), of quartzite; length, 5 in. These implements, grooved round the middle, or "waisted," have repeatedly occurred in the cyttiau, and elsewhere in Anglesey. Compare specimens figured in the memoir on the habitation at Ty Mawr, *Archæol. Journal*, vol. xxvi. pp. 303, 320, figs. 10, 11.

Fig. 2. Ovoid pebble, probably a pounding-stone, with traces of percussion at each of its ends.

Fig. 3. Implement of schist, supposed to have been used as a whetstone.

Fig. 4. Grinding-stone, as supposed, for paint, possibly for body-painting; the surface, which is much worn by friction, being strongly tinged with red color, as would be caused by grinding hematite upon the stone. Portions of circular grinding-stones, likewise stained with red, were found near it. These curious relics were found on the floor of the oblong building, of which a ground-plan is given in the foregoing memoir. Traces of the ancient usage of body-painting in the British Islands are of very rare occurrence; a few notices of objects imagined to be connected with the practice have occurred in the Hebrides, as stated in the foregoing memoir. Mr. Bateman found in the Liff's barrow, Derbyshire, with numerous relics of flint and stags' horn, three pieces of red ochre, that he concluded to be for body-paint. Vestiges of Antiqu. of Derbyshire, p. 43. In the Museum of the Society of Antiquaries of Scotland there is a small stone box, found in a "Picts' House" at the Bay of Skaill, Orkney, that contains red pigment, supposed to be body-paint. It is figured in the notice of these primitive dwellings by Mr. G. Petrie, *Proceedings, Soc. Antiqu. Scot.* vol. vii. pl. xlii. A lump of white pigment was also found.

PLATE VI.—Pen y Bone.

Figs. 1, 2, 3. Oblong pebbles, probably mullers, suited for pounding, or for use as small hand-hammers.

Fig. 4. Oval flat hammer head, of schist, pierced for hafting; the perforation is worked from both sides, as shown in the section. Objects of this type, occasionally of circular form, seem to belong to the class of implements, by means of which other implements or weapons were chipped out or rough-hewn. See Nilsson, *Primitive Inhabitants of Scandinavia*, edited by Sir John Lubbock, p. 10; Lindenschmidt, *Alterth. mns. Heidn. Vorzeit*; Heft i. taf. 1; Heft viii. taf. 1, &c. These perforated stones have been supposed, however, to have been sinking weights for fishing-nets.

Fig. 5. Ovoid pebble, with traces of percussion at one of its ends only. An implement of the same class as that figured, plate V. fig. 2.

Fig. 6. Portion of a flat polishing stone, or implement of some like use. It is a shore-pebble of quartzite, measuring in its present imperfect state rather more than 3 in.

PLATE VII.—Two.

Fig. 1. A low table, formed of four roughly-shaped slabs, the top-stone being about 3 ft. in breadth, and raised on three stones about a foot in height.

Fig. 2. Roughly-shaped block of schist, that may have served as a seat (?). It was found near the table.

Fig. 3. Culvert or drain, 34 ft. in length, formed of rough slabs of schist, serving to cover a culvert formed of slabs of the like material placed diagonally, flagged at the bottom, which measured about a foot in width. The depth of the culvert was 15 in. It was partly filled with an ochreous deposit. A round perforation, of uncertain use, occurred in one of the covering slabs; it has been supposed, however, that this, and also the little channel, may have served for ventilation, that must doubtless have been requisite in so very confined a space as the interior of the cyttian, especially to supply air to feed the fires within, or possibly to assist in driving out the stifling smoke. In the remarkable subterranean dwelling in Sancreed, Cornwall, near Chapel Euny, the floor is described by Mr. Edmonds as "well paved with granite blocks, beneath which, in the centre, ran a narrow gutter or bolt, made, I imagine, for admitting the external air into the inmost part of the building, from whence, after flowing back through the cave, it escaped by the cave's mouth, a mode of ventilation practised immemorially by the miners in this neighbourhood when driving adits, or horizontal galleries underground." *The Land's End District*, p. 52.

PLATE VIII.—Two.

Fig. 1. Upright slab, of schist, found near the table figured in plate VII. Length, 2 ft.; breadth, 8 in.

Fig. 2. Oblong mortar or trough, of trap rock, found near the table; at one of its ends there is a cavity, the intention of which has not been explained. This curious object is fashioned rudely. Length, about 12 in.; greatest height, $7\frac{1}{2}$ in. A similar trough of trap rock, found in the cyttian at Pen y Bone, in 1868, with a portion of another like object, is described, *Archaeol. Journal*, vol. xxvi. pp. 308, 320; fig. 16.

Fig. 3. Bronze bow-shaped fibula, of Roman type. The *acus* has been unfortunately lost.

Fig. 4. A hammer-stone, or weight (?). Length, $4\frac{1}{8}$ in. Compare plate V. fig. 1.

PLATE IX.—Cerrig y Ddewi, Llangwyllog, Anglesey.

Fig. 1. A cinerary urn, of pale brown ware, found in levelling some grave-mounds near Llangwyllog, Anglesey, on a farm belonging to Sir R. Bulkeley, Bart., called Cerrig Ddewi (Druidical stones). This urn contained burnt bones; the lower part was much damaged, and has been skilfully repaired by Mr. Ready. Height, 9 in.; diameter, $8\frac{1}{4}$ in. It was procured, with an "incense cup" (fig. 2), two celts, and a bronze palstave, by Mr. H. Pritchard, of Trescanen, through whose kindness these objects are now published; they have been presented to the British Museum. The site, where this and other relics figured in this and the following plate were brought to light, is near the spot where the antiquities of bronze and an amber necklace, now in the British Museum, were found in 1854. Arch. Cambr., third series, vol. xii. p. 97. These urns form a valuable addition to the series of examples found in Anglesey and North Wales, published Archaeol. Journal, vol. xxiv. p. 13.

Fig. 2. A diminutive vessel, of red brick-colored ware, in form resembling the nave of a wheel, and having seven perforations around it, as if for the spokes. Height, $2\frac{1}{2}$ in.; diameter, at the mouth, 3 in. This little urn seems to belong to the class designated "incense cups" by Sir R. Colt Hoare, of which many examples have been described and figured, Archaeol. Journal, vol. xxiv. p. 22. This appellation is by no means satisfactory; these cups may have served for the conveyance of fire, or for keeping it in the dwelling; but the subject presents points of great difficulty.

PLATE X.—Cerrig y Ddewi, Llangwyllog.

Fig. 1. Celt, of white magnesian stone, found, about 1840, near the two urns last noticed. The material, it has been stated, does not occur either in Wales or in Ireland, although it is believed that celts formed of a similar stone are found in the latter country. Length, $7\frac{1}{8}$ in.; breadth, at the cutting edge, 3 in.

Fig. 2. Smaller celt of the like material. Length, $4\frac{7}{8}$ in.; breadth, $2\frac{1}{4}$ in.

Fig. 3. Bronze palstave, of ordinary form, without a side-loop. Length, about $6\frac{3}{8}$ in. It is of somewhat Irish type, in the widely dilated cutting edge with recurved extremities. One of the bronze moulds found at Danesfield, near Bangor, a quarter of a mile from the ferry to Anglesey, is fashioned to produce objects of the same proportions and without a loop, the second being for looped palstaves. Arch. Cambr., third series, vol. ii. p. 127. See *ibid.*, pp. 122, 124, notices of bronze palstaves found in Anglesey and North Wales. Rowlands, in his *Mona Antiqua*, p. 86, records the discovery of a considerable number at the Rhied on the shore of the Menai. The Rev. W. Wynn Williams has given two, one of them without the side-loop, found near Llanidan, in the same parts of Anglesey. They are in the possession of Lord Boston. One of these palstaves has an unusual proportion of copper in its composition. Arch. Cambr., third series, vol. iii. p. 283.

PLATE XI.—Old Geir, Anglesey.

Fig. 1. Shallow quern or mortar, with which were found the stone balls next noticed.

Figs. 2, 3. Two stone balls, one of them formed with remarkable regularity. Diameter, nearly $3\frac{1}{4}$ in. and $2\frac{3}{4}$ in. respectively.

Fig. 4. Hammer-stone, or weight (?), of quartzite. Length, $5\frac{1}{2}$ in. See notices of relics of this description from various parts of England, in the lake dwellings in Switzerland, &c. ; Arch. Journal, vol. xxv. p. 47. Some of them may have been grain-crushers.

Fig. 5. Hammer-stone, of pale grey-colored sandstone, of peculiar form and elaborately worked. No similar example has been noticed. Length, $3\frac{1}{2}$ in. ; diameter, $2\frac{7}{8}$ in. It is supposed that it may have served as a weight for fishing-nets,—the “sink stone” of the northern anti-quaries,—or possibly for the loom.

Fig. 6. Stone ball, fashioned with numerous facets strongly marked. Diameter, $2\frac{1}{2}$ in. Compare a similar object found in the previous excavations in 1868, Arch. Journal, vol. xxvi. p. 320, fig. 12.

CAER Y TWR, HOLYHEAD MOUNTAIN.

The entrance to this stronghold is represented as a frontispiece to the foregoing memoir ; it faces east, leading from the town of Holyhead. The Caer is about two-thirds of the distance on the ascent from the town ; it is surrounded by a rude wall of dry masonry, following the ridge of rock, which in many places is almost perpendicular, and from 40 ft. to 50 ft. above the plateau of the mountain below. This wall encloses an area of about 60 acres. The entrance is very steep—the wall on either side higher than in other places ; there is indeed some appearance, from fallen stones, that the entrance was defended by side walls for about 50 yards, after passing the opening in the enceinte. There is a narrow cleft in the mountain face to the west, above the *débris* of rocks that have fallen in some fearful convulsion, leaving a perpendicular face of rock 200 ft. in height. This gap, which is not seen from below, would only admit one person at a time. The sides are perpendicular rocks, 20 ft. or more in height, through which a very steep path winds, and might serve for escape or to secure access from the village of Cyttiau at Ty Mawr. The fortress is called, in the Ordnance Survey, “Caer Gybi,” as shown in a map that accompanies a former memoir (Arch. Journ. vol. xxiv. p. 230), but it is evidently a work of a much earlier period than the times when, according to tradition, some religious foundation was established by St. Kybi at Holyhead.

The Central Committee desire to renew their grateful acknowledgments of the encouraging liberality of the Author of the foregoing Memoir, in his contribution of the whole of the highly interesting illustrations by which these valuable notices of his investigations are accompanied.

ANCIENT RELICS FOUND IN HOLYHEAD ISLAND.



Cittiau at Ty Mawr, Holyhead Island, excavated in 1868.

Elevation and ground plan of a fire place, showing also stone mortar and grinding stone found near it, in the circular habitation No. 3: *Arch. Journ.*, vol. xxvi., pp. 304, 319.

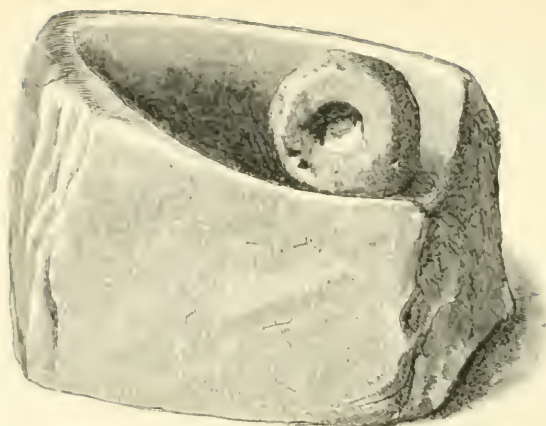


Fig. 1.—Quern and grinding stone. Width $11\frac{1}{2}$ inches



Fig. 2.—Small mortar, or bwapu. Width 3 in.



Fig. 3.—Polishing stone. Dimen. $2\frac{1}{4}$ in. $2\frac{1}{2}$ in.



Fig. 4.—Sandstone pebble, of quartz, probably a sea-shore pebble. Weight 16 lbs. Breadth about $4\frac{1}{2}$ in.
Atollu (see *Text*) found in the cove at Ty Mawr, in Holyhead Island.

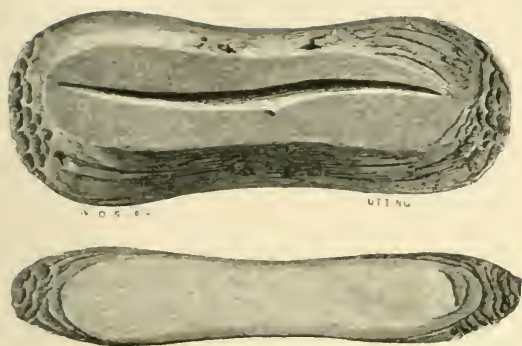


Fig. 1. Whetstone found near the spot where the deposit of bronze celts, &c., was found near Ty Mawr in 1832. Length 54 in.

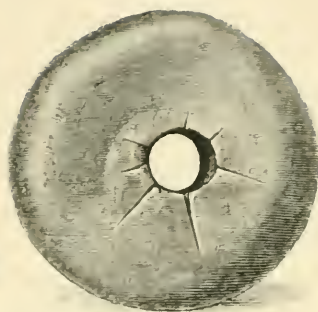


Fig. 2. Stone whorl or button (?). Diameter 2½ in.

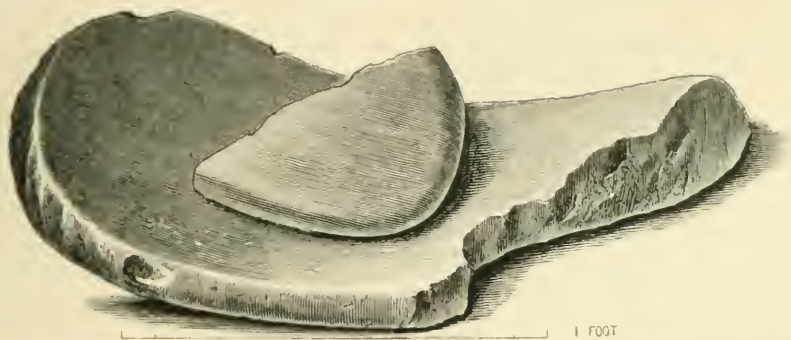


Fig. 3. Saddle-quern and fragment of a rubber, of trap or basaltic rock. Found at Mynydd Gŵf Du, Holyhead Island.

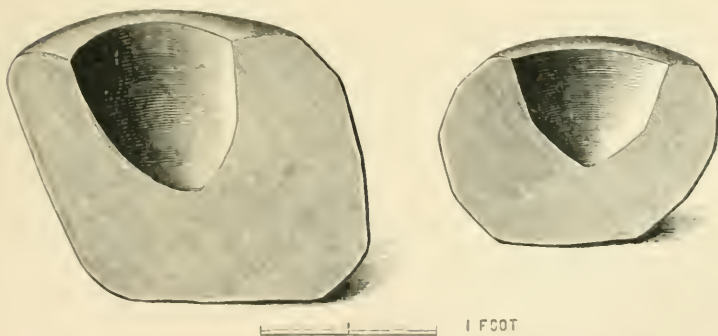


Fig. 4. Sections of mortars, of trap, found at Mynydd Gŵf Du, Holyhead Island.



Fig. 2. Vitrified pipe.



Fig. 3.—Stone muller. Length of the fragment $4\frac{1}{2}$ in.



Fig. 1. Pipe of vitrified matter and burnt clay. Scale, two thirds orig. size.



Fig. 4. Heart-shaped pebble, probably a pounder. Breadth $1\frac{1}{2}$ in.

Fig. 1. Pipe of vitrified matter and burnt clay. Scale, two thirds orig. size. Fig. 4. Heart-shaped pebble, probably a pounder. Breadth $1\frac{1}{2}$ in. Instruments of stone, and a vitrified pipe, found in the Cytiau at Pen y Bone, Holyhead Island.

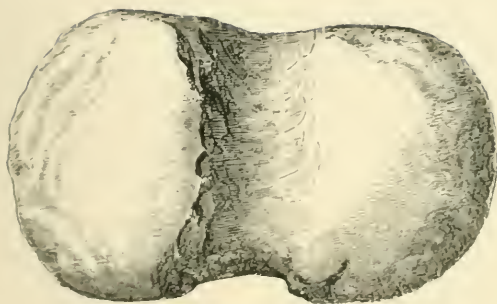


Fig. 1. — Hammer-stone, or weight (?) of quartzite.
Length 5 in.



Fig. 2. — Pounder. Length $3\frac{7}{8}$ in.



Fig. 3. — Whetstone (?) of schist. Length $6\frac{1}{2}$ in.

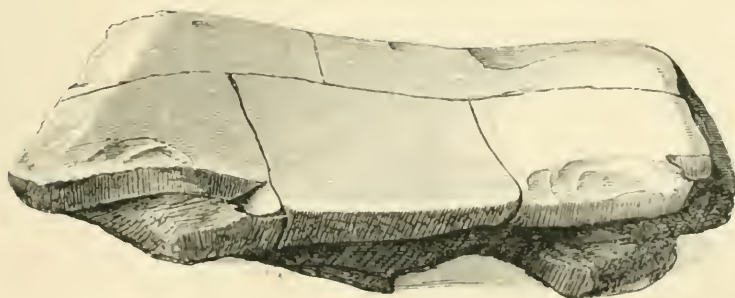


Fig. 4. — Grinding-stone, of quartzite, deeply colored with red, probably by grinding hematite (?)
Length 11 in.
Implements of stone, found in the Cytiau at Pen y Bone, Holyhead Island

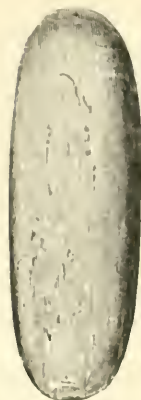


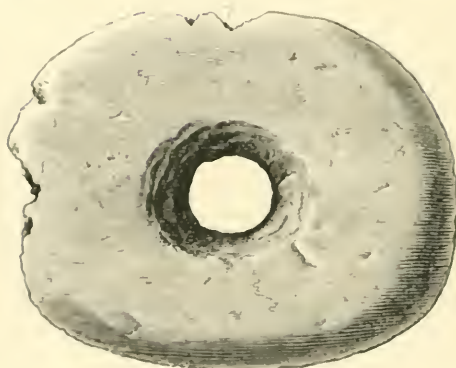
Fig. 1. —Length $4\frac{1}{2}$ in.



Fig. 2.—Length $4\frac{1}{2}$ in.



Fig. 3. —Length $4\frac{1}{2}$ in.



A

Fig. 4 Hammer of schist —Length 3 in.



SECTION AT A



Fig. 5.—Length 7 in.



Fig. 6—Polishing stone, of quartzite. —Length 4 in.



Implement of Stone found at Pen y Bone

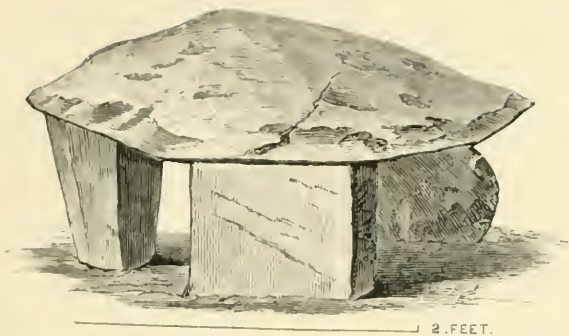


Fig. 1.—Stone table, found amongst ruined foundations.



Fig. 2.—Block of schist, possibly a seat, found near the table.

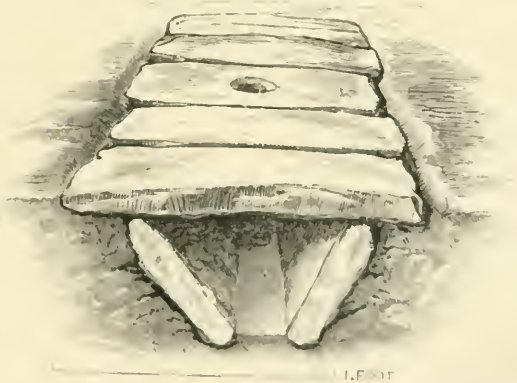


Fig. 3.—Drain, formed of rough slabs of schist.

Ancient relics found at Twr, in Holyhead Island.



Fig 1. Erect slab of schist, found near the stone table.

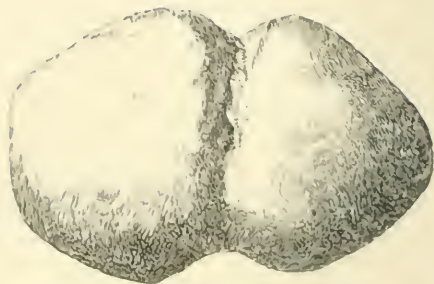


Fig. 4.—Stone hammer, or weight (?).
Length $4\frac{1}{8}$ in.

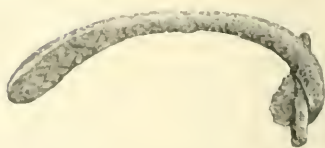


Fig 3.—Bronze Roman fibula.
Original size.



Fig. 5.—Trough or mortar, of trap, found near the table. Length 12 in., greatest height $7\frac{1}{4}$ in.

Ancient relics found at Twr, Holyhead Island



Fig. 2.—"Incense cup," or fire vessel (?), of red brick colored paste, found in a barrow at Cerrig y Dolewi, Anglesey. Height $2\frac{1}{4}$ in., diameter at the mouth 3 in.

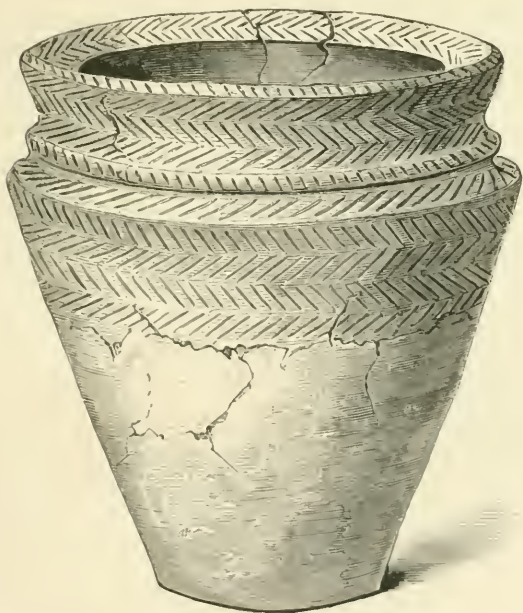


Fig. 1.—Cinerary urn of pale brown ware. Found, about 1850, in a barrow at Cerrig y Dolewi, in the parish of Llangwyllog, Anglesey. Height 9 in., diameter 8 $\frac{1}{4}$ in.

The two vessels above figured have been presented to the British Museum by the Hon. W. O. Stanley.

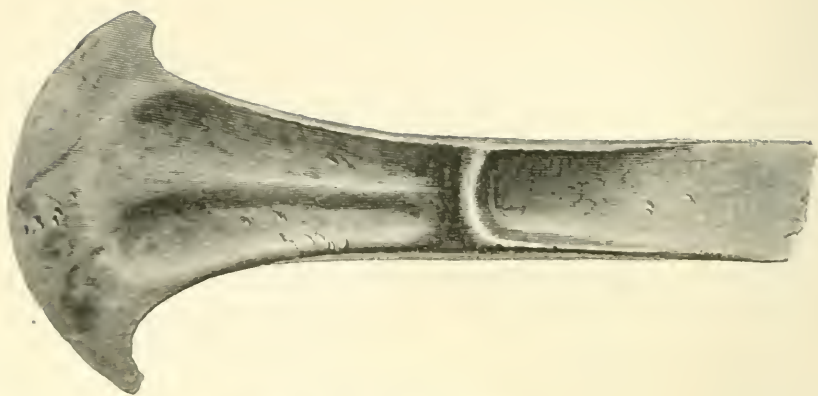


Fig 3 — Bronze palstave Length 6½ in.



Fig 1 — Head of rough-hewn stone Length 7 in
Width 3 in

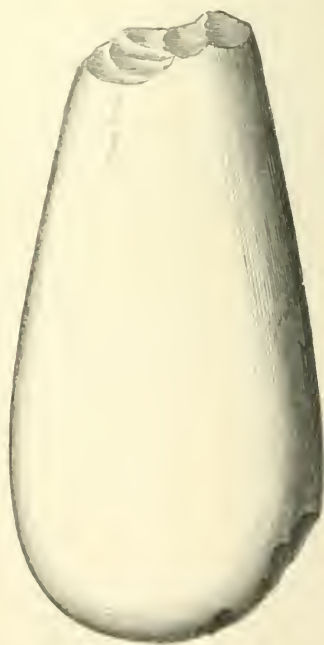


Fig 2 — Length 4½ in., breadth 2½ in.

Axident relics found in the parish of Easingwold, Angles.



Fig. 1.—Shallow quern, or mortar, found with the stone balls.



Fig. 2—Stone ball
Diam $2\frac{3}{4}$ in.

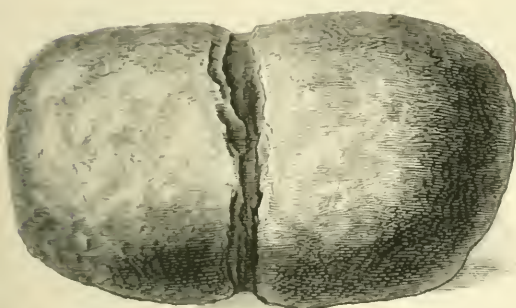


Fig. 4.—Hammer-stone, or weight ? of quartzite. Length 4 in

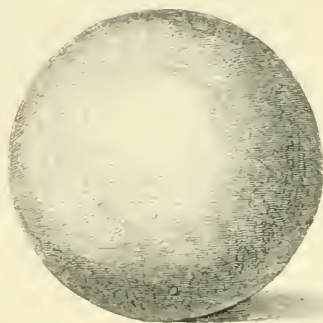


Fig. 3—Stone-ball. Diam. $3\frac{1}{4}$ in.

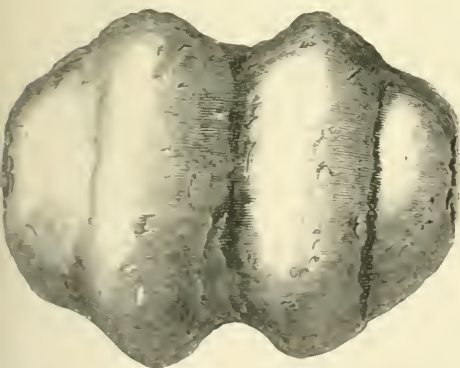


Fig. 5.—Hammer-stone, or weight (?) Length $3\frac{3}{4}$ in.

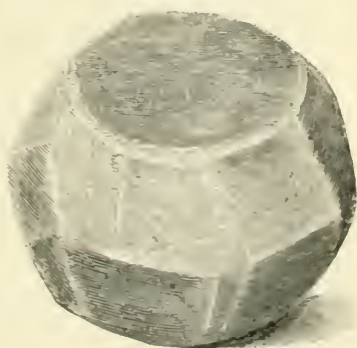


Fig. 6.—Stone ball, with facets. Diam $2\frac{1}{2}$ in.

Ancient relics found at Gell, Anglesey.



RECENT ARCHÆOLOGICAL RESEARCHES IN ROME.

By J. H. PARKER, Esq., F.S.A.

I HAVE already given a short account of the excavations and explorations made in Rome during the last season, with the help of the Exploration Fund ; but as I am now able to give some further particulars, I will give a *résumé* of my labours. The first thing to be done was to complete the great map of the aqueducts from Subiaco to Rome, which I had initiated in April, 1869, when I went to Tivoli and Subiaco with Signor de Mauro, a young Roman engineer of good reputation whom I had previously tried and had found careful and accurate, and Dr. Fabio Gori, a learned archæologist and a native of Subiaco, who had long studied the aqueducts, and had walked along the line from Subiaco to Rome with that object. I had long been trying in vain to understand the system of the aqueducts, and to distinguish the different lines described in the admirable work of Frontinus ; I had obtained all the best maps that were to be had, and the best works on the subject, and the personal assistance of others who had studied them. But I had found it impossible to understand them, or to trace the different lines, without having a new map made for the purpose. During the week that I was with the gentlemen I have named I saw the difficulty of our task, and that it was a work requiring time and patience, and a great deal of real hard work, and often rough work too in difficult ground. I also saw that my two companions and assistants entered thoroughly into the spirit of the task, and could be relied on. I have every reason to be satisfied with the work now it is done, and see that the object aimed at has been attained. The aqueducts are now to be understood in a manner that they never could have been before. But they are a subject for a separate lecture, and could not be explained in a few sentences. The subject is well worthy

of attention. Rome was better supplied with water than any other city in the world, and engineers may well study the system. I may mention that the municipality of Paris has purchased a complete set of my photographs of the aqueducts, and my map, for the use of the water department of that city.

For strictly archæological objects, also, it is impossible to understand the antiquities of Rome without paying attention to the aqueducts; there are remains of them in all parts of the city often little understood. We have now traced them from their sources to their mouths, not only up to the walls of Rome, but through Rome to the various reservoirs where the water was distributed, and eventually to the Tiber, into which the surplus water was discharged.

In one of my excavations this spring I found a cave under the Aventine, near S. Sabba, where five of the aqueducts met, discharging the remaining water into one, the Appia, the oldest and the lowest. Each successive aqueduct was carried at a higher level than the preceding, and in the neighbourhood of Rome they cross over one another on different arcades, very much like the railways near London. Like them, also, they are sometimes under ground, in tunnels, then in a cutting, then on the surface, then on an embankment, and then on an arcade. The aqueducts have also an angle at each half mile to break the force of the water, with a reservoir and filtering place at each of these angles. The enormous number of these reservoirs, or *Castella aque* as they are called, is the great characteristic of the Roman aqueducts. The latest and most important of these reservoirs, which were also called *Lacus* or *Lochs*, are part of the river Anio itself, dammed up for the purpose in a gorge of the rocky mountains through which it passes above Subiaco at about sixty miles from Rome. Here the engineers took advantage of a natural cascade, and built an artificial one at a considerable distance in front of it, but still in the gorge of the rocks, and made the river fall over the great wall they had built for the purpose, the interval between the two being the reservoir, about a hundred feet deep. Near this spot the two great monasteries of S. Benedict and S. Scholastica were afterwards built, amid some of the most picturesque scenery in the world.

For the last seven miles into Rome, from the great Pis-

cinæ or filtering places, where the conduits emerge from the tunnels in the hills, the aqueducts were carried upon two arcades over the flat and level country. The earliest of these was the Marcian arcade, on which the conduits of the Tepula and the Julia were also carried. This arcade ran over the line of the Anio Vetus, and the Aqua Marcia had followed nearly the same line from its source near Subiaco, but the Tepula and the Julia were only added to it at the Piscinæ, and came from a different direction towards Albano. The Aqua Claudia and the Anio Novus were carried on a second arcade parallel to the other at a short distance from it, and crossing it from time to time at one of the angles.

From the Piscinæ the little river called by many names, and amongst them the Almo, winds about the foot of the arcades, now on one side, now on the other; and into this stream the surplus water from the aqueducts in time of floods was carried. We must remember that the later aqueducts were branches of the river Anio itself, which was dammed up to serve as reservoirs for them, and therefore were as liable to floods as the river itself or any other mountain stream. The Almo is also liable to its own sudden floods, and this also is a mountain stream coming from the hills between Frascati and Albano. In the course of my investigations of the aqueducts I discovered that this little river is divided into two branches, at about three miles from Rome, near the Torre Fiscale and the fine ruins of the villa of Septimus Bassus, called Sette Basse and Roma Vecchia. This division into two streams had not been observed before, and it is an important discovery, as it explains several difficulties in the historical topography of Rome. One branch of the Almo runs through Rome, and is commonly called the Marrana, which is only a general name for a small stream of running water. This branch has been made into a canal or mill-stream, and is carried across low ground in a bank of clay, with locks¹ and lashers to carry off its surplus water, so that there should be no possibility of a flood of

¹ One of these *locks* continues in use, near the Torre Fiscale; there are remains of another, not now in use, two or three miles farther from Rome. The deep fosse or bed of this small river winds about the Campagna for many miles. It is commonly dry, but after rain a strong stream of water runs in it, and all these

channels unite at the head of the valley of the Caffarella. Every one who knows Rome must have observed these deep water courses; but few have followed them up and ascertained that they are different branches of the same river, which is called by many names, one of which is the Almo.

this stream in Rome, and at the same time there should always be a supply of water for those mills in Rome and in the Campagna near to it, which were also supplied by this stream. It enters Rome under the *Porta Metronia*, passes through a mill in front of the Botanical Garden of the city, then between the sites of the *Porta Capena* and the *Piscina Publica*, and through the *Circus Maximus*, where it also passes through another mill on the site of one of the curves of the *Circus*, and through the gas-works on the site of the *Carceres*; it then passes through two other mills, one near the church of *S. Maria in Cosmedin*, the other on the bank of the Tiber, built upon and against a part of the *Pulchrum Littus* of the Kings of Rome. This is a fine wall against the bank of the river, built of large blocks of tufa, as usual at that period. In this wall an opening is left for the river to pass through, and this was evidently left at the time the wall was built, and not cut through it afterwards. This is an important point, because it shows that the level of the stream at its mouth has not been altered since the time of the Kings, and that the level of the Tiber has not been altered. From the winding course of the stream it is evidently natural, although it has been raised on a bank of clay in many parts, and the quantity of water that flows through Rome is regulated by locks. There is reason to believe that this was done in the time of the Emperor Tiberius, from a passage in Tacitus recording deputations to that emperor for and against altering the course of the rivers to avoid the floods which then, as now, did so much damage in Italy at times. But the farmers on the line of the principal rivers said they should be ruined if the course of the rivers was altered. This small river may probably have been regulated at that time when attention was called to the subject. That it had not been done in the time of Cicero is evident, for in one of his letters he describes the mischief that was done by a flood of this stream, which carried away several wooden shops or booths from the bank in front of the garden of his son-in-law, Crassipes (now the Botanical Garden), and took them as far as the *Piscina Publica*, that is, from south to north exactly along the line of this small stream. The Tiber runs from north to south, and a flood of that river would have brought them the opposite way.

It is time now to mention the other branch of the *Almo*,

the one usually so called,² which runs through the valley of the Caffarella, and has its mouth near S. Paul's. I have traced this back to the loch before mentioned, where the old foss or bed of the river remains deep in the soil ; and when the water is high, it runs freely over the lasher into and through this bed, and during floods covers the country round for miles, but at other times, in dry weather, this deep bed or foss, as it is called, is often dry, so that the stream is intermittent for three or four miles. But near the church of S. Urbano, other springs fall into this deep bed, which never fail, so that, in the latter part of this branch of the river, water is always flowing ; and this has caused people to overlook the junction or division of the river into two branches.

We again hired some of the cellars under the houses on the Via di Marforio, which we had ascertained to be chambers of the great Mammertine prison. Here we made considerable excavations, and found two doorways below the level of the present floor, which is itself nearly twenty feet below the level of the street. We found this floor to consist of a bed of that peculiar kind of cement that resists the passage of water or of moisture which was used for the aqueducts in the time of the Emperors, but was not used afterwards, and the exact composition of which is not known, but it is believed to be a mixture of pounded clay and fresh burnt lime. It is called by Vitruvius, *opus signinum*, and by the modern Italians, *coccio-pesto*. Under this floor of cement we found about ten feet of earth, and then the original pavement, covered with a foot or two of water. It appears that the floor was raised in the time of Tiberius, when the prison was repaired and restored, as is recorded on an inscription on the other part of it called the Prison of S. Peter, which appears to have been the vestibule of the great prison. It is a curious coincidence that in the time of the Republic complaints are extant of the hardship of being thrown into a cold bath at the same time as into prison. It was probably to remedy this evil that the floor was raised.

The next place in which we obtained leave to work was in the great vineyard of Prince Torlonia, on the Aventine,

² S. Gregory the Great, writing in the sixth century, calls the stream which has its mouth near S. Paul's by the name of

the Almo. If this is the Almo, the other branch of the same stream must be the Almo also.

between S. Prisca and the Porta Ostiensis or S. Paoli. The prince behaved very handsomely to us, and gave us permission to do what we asked for, and further made us a present of the ground we had excavated, with permission to leave it open permanently for the benefit of future antiquaries, instead of being obliged to fill it up again immediately, which is the general custom in Rome. The place where we began was at a fine piece of the wall of the Kings, on the cliff at the south-east corner. Canina had begun to excavate here about twenty years before us, but he had only gone down about half the depth, and had not shown the thickness or the construction of the wall in that part. We found the existing remains 45 feet high and 12 feet thick, and the wall had been probably 60 feet high, as the upper part is wanting; it only remains up to the level of the soil. It rests at the bottom on a ledge of the tufa rock, cut away for the purpose; and there is little doubt that the wall is built of the blocks of tufa cut out on the spot. In part of the wall, near the angle, two arches have been inserted, one of which remains perfect, and is of nearly the same early character as the wall itself, built of large blocks of tufa, but of rather different quality and of a reddish tinge, dug out of a quarry near, under S. Prisca, through which the aqueduct passed. Behind these arches is a mass of concrete forming a platform, on which it appears that a balista or catapult was placed, and that the arches served for embrasures, as for modern cannon. For this suggestion I am indebted to Visconti, and it appears a probable one. It has been conjectured also, with apparent reason, that the additional fortifications were made at the time when Hannibal threatened Rome. This was an exposed corner, as there was no outer wall or line of defence in this part until the time of the Emperor Claudius. It was a fort to defend the approach to an important gate of the city at the outer angle of the gorge, at the inner extremity of which was the gate, where four roads meet, and where the aqueduct passed. On the opposite corner, under S. Sabba, is another fort, now mutilated, and appearing to be built of concrete only, in layers. By excavating at the foot of this, however, we found remains of the facing of large tufa blocks as in the other fort, only in the upper part they had been carried away for building purposes.

In front of the wall first mentioned, near S. Prisca, are remains of the great foss filled up in the time of the Republic or early empire, and in the loose earth with which it is filled up are four deep pits, like wells. We at first thought they were wells going down into an aqueduct, as is common in Rome; but on getting to the bottom of one of them we found this was not the case. They descend to the ledge of rock before mentioned at the bottom of the wall and of the foss. In the walls of these wells, which are of rough stone, holes are left for a man's foot, to enable him to go down, probably to clear them out when required. These pits are just within another wall of concrete, faced with *opus reticulatum*, or the reticulated work of the time of Trajan, believed to be part of the remains of the *Thermæ of Sura*, the cousin of that Emperor. Just below these, and passing through the great wall of the Kings, is a brick drain of a few years' later date, the brick-stamps giving the date of A.D. 130. The walls of the *Thermæ* are built in an oblique direction against the old wall, as if the builders were ignorant of its existence, or entirely disregarded it.

In the same large vineyard, at the further end of it towards the Tiber, but still on the high ground at the top of the hill, stands the house of the Jesuit gardener, usually called Dom Giorgio. It is a mediæval building, of very picturesque character. We had been recommended by Prince Torlonia to make friends with the Jesuit gardener, and we had done so, and he told me one day that in the cellars under his house, there was some old work that he thought might interest me. We accordingly lighted our tapers and went down to explore at a considerable depth; I at once saw that we were in the subterranean chambers of a house of importance of the time of Trajan. There were long corridors and many chambers; the walls of which were of the construction of his time, of brick and reticulated work, and one of these chambers has fine fresco paintings. These were filled up with earth nearly to the top, but we had it all excavated, and drawings made of it by Signor Lanciani, one of the best architectural draughtsmen in Rome. The painted chamber is not very large, but very lofty. These chambers are evidently part only of an extensive mansion; another part, near this, was found when a fort and battery were making there in 1868 and 1869;

at that time I saw the opening into it, but a ladder was required to have gone down into it, and the soldiers would not permit me to explore it. Remembering that the Catalogue of the fourth century places the private house of Trajan on this hill, and that we have no other traces of an important house of his time, there can be little doubt that these are remains of that house, and that it was connected with the *Thermæ* of his cousin, Sura, now in the same vineyard.

Other excavations of some importance have been carried on in the vineyard of Signor Brocard, near the Via Appia, opposite to S. Sisto Vecchio, between the present road and the *Thermæ* of Antoninus Caracalla. In this vineyard are the remains of the porticus begun by Caracalla and finished by Heliogabalus, as a completion of the *Thermæ*. The word porticus appears to be used in the sense of arcade, not colonnade; at least no remains of a colonnade or portico of this time have yet been found. The authors of the time of the empire mention this place as one of the richest in Rome, and it is probable that more will be found in future excavations. What we have at present ascertained is that each of the arches of the great arcade was a *balnea*, or bath chamber; and in this part a large number of *balneæ* are mentioned in the catalogue. At the back of the arcade, near the top of the wall, is the *specus* or conduit of a branch aqueduct, to supply the baths with water. The ground at the back is quite 20 feet higher than it is in front; and the wall at the back of the arcade is left rough, and not intended to be seen. We excavated to the bottom of one chamber, and to the same level at the back of it: my orders to the navvies were to dig on till they came to a pavement or to water. They came to both, at the depth of 30 feet from the surface, at the back of the arcade.

The pavement we traced in an oblique line from the Via Appia to the house excavated by Guidi two or three years ago, miscalled the house of Asinius Pollio, but really (as I believe) the private house of the Emperor Hadrian, according to the Catalogue before mentioned. Here a fine mosaic pavement had been found, and the chapel of the *Lares*; but in consequence of the wet season it was all under water during the whole of this spring. This liability to be flooded was probably observed in the time of the early empire, and for this reason the *Thermæ* of the Antonines,

or Caracalla, were built on a higher level. The same may be observed in many parts of Rome : the old foss-ways were filled up in the second and third centuries, and with them the buildings on the same low level.

Some remains of a colonnade or the portico of a temple have been found in front of the arcade at the low level, at the back of the church of SS. Nereo and Achilleo ; it may have been a small temple only. The work was stopped by water, but can be continued next season, if the necessary funds are forthcoming. Last year we found remains of another colonnade at the same low level on the opposite side of the Via Appia, in front of S. Sisto Vecchio. It may possibly have been that there was a series of colonnades of small columns parallel to the road on both sides here, and from them it was called the Xystus, a Greek name for such a colonnade.

Having now finished this account of the excavations in which I have myself been concerned, I propose to add some notice of what has been done by others during this season. The Germans, under the direction of Dr. Henzen, dug another pit in the grounds of the college of the Arvales, but found nothing. The Pontifical Government carried on their excavations at the Marmorata, and in their part of the palaces of the Cæsars on the Palatine Hill, under the direction of Visconti. Both were continuations of work previously begun. At the Marmorata, the new carriage-road on the bank of the Tiber to enable strangers to go and see the excavations, had been much damaged by a great flood ; and during a great part of the present season the men were employed in repairing it. The actual work of excavation was then carried on for some distance further down the river, and a continuation of the landing places ; and the inclined planes from them to the top of the bank or cliff was found as was expected. Some more large blocks of valuable marble were also found where they were landed. It is hoped that the government will carry on this work, under the direction of Visconti, as far as the wall of Aurelian, and that when Visconti has finished his new road, and the wall which separates it from the great vineyard of Prince Torlonia, in which the ruins of the Emporium are situated, that the prince himself will excavate the lower chambers of these great warehouses, of which the remains of the upper part only are now visible.

On the Palatine, on the side next the Circus Maximus, several more of the guard chambers under the great galleries were cleared out, and remains of walls of tufa in the style of the Kings were found in two places, going transversely across the hill. These indicate the two sides of the great foss or trench on the south side of the arx or citadel of Romulus. Other remains in the same direction have been found by Signor Rosa in the French part, between these and the Arch of Titus.

Visconti has also brought to light the remains of the Stadium, or place for foot-races, towards the south end of the Palatine, opposite to the monastery of S. Gregory. These remains are of considerable importance and interest; they belong to the third century, probably of the time of Commodus, and are exactly a stadium in length, with remains of terraces on each side supported on arcades, with columns attached to the piers, of which the bases remain. They are of large size, and built of concrete, faced with marble, instead of being of solid marble, as the earlier and smaller columns are. The Stadium is exactly like a small circus; the east end is square, and the west end rounded. At this end is the Exedra, or seat for the Emperor, which is back to back to his seat for seeing the Circus Maximus. There is another large Exedra on the south side, in the centre of the galleries. The walls of these at the back are double, with a narrow passage between the two walls, apparently for no other purpose but to keep the seats dry. The same plan and arrangement occur in the ruins of the buildings of the Ludus Magnus, against the cliff of the Claudium, on the east side, opposite to the promontory on which now stands the church of the Santi Quattro Coronati. Under the Exedra and the galleries at the north end of the Palatine are a series of chambers, some of them bath chambers, in which are paintings remaining, with a reservoir and conduit for water, which was brought across the valley from the Cælian on an arcade, the remains of which are well known. Most of the remains of the palaces of the Cæsars on this part of the Palatine are of the third century; but some of them are earlier, perhaps as early as the first.

On the northern side of the Stadium is the Villa Mills, now, unfortunately, a nunnery. Under this modern building are a series of fine vaulted chambers of the first century, to which

I obtained access by accident only. There is no communication between them and the nunnery above, but because they are under it no one is allowed to enter them. They are the remains of an important building of the early empire, and a set of engravings of them was published in the last century under the name of the House of Augustus; but this name was given by conjecture only, without any authority; and although it has been, as usual, blindly followed by all later writers, it appears to me to be an erroneous conjecture. The plans and drawings are very incorrect: there are two fine pentagonal halls which are scarcely visible on the plan, and it was more probably the Penta-Pylon, which we know from the Catalogue was on this hill, and which has not hitherto been found; this is, however, a doubtful question. The accurate account of the house of Augustus given by Dion Cassius, one of our highest authorities, does not agree with this site; but I have more to say on this subject when I come to the French part of the hill.

The excavations made by order of the Emperor of the French, under the direction of Signor Rosa, during this season, have brought to light the underground chambers of an important house of the time of Sylla or Julius Cæsar, having small and very plain chambers, though numerous ones. At the north end of this house an addition has been made, in the time of Augustus, of large and fine chambers richly decorated with fresco paintings and other ornament, and a fine mosaic pavement. This house is called by Signor Rosa the house of the father of Tiberius, and the reason for this is, that a passage leads from it at the same low level as the chambers of the house itself, into the great passage from the state apartments in the centre of the Palatine Hill (over the foss of Romulus, when that was filled up like the other foss-way in the first or second century), to the great palace of the Cæsars or Emperors at the north end of the Palatine. But the whole of the Palatine Hill is undermined by such subterranean passages, some of which were made in the old foss-ways when the level was raised to the original height, as shown by the tufa cliffs round it, with early walls built up against them. Signor Rosa considers the great trench across the middle of the Palatine, which I consider only the foss on the south side of the Arx of Romulus, as a natural valley, or *inter-montium*, but this

does not appear to be probable. On both sides of the hill, in that case, the ox and the cow who marked out the boundary according to Tacitus, would have had a steep cliff to climb up or go down. It is far more probable that they included the whole of the Palatine Hill, with the Velia and the Velabrum, and that this space was divided into different parts—the Arx, the Town, the Slopes, and the half-detached forts to protect the principal gates, like other ancient cities of the same period,—whether Etruscan, or Latin, or Oriental, or Western—according to the custom of the age, at the period of the great earth-works everywhere.

All the three houses in which Augustus resided are described by Dion Cassius. He was born on the Palatine, but in a low part of it, on the slopes towards the Velabrum, opposite to the Capitol, in a street called the Ox-head Street, which must be the zig-zag street that leads down from the Porta Romana to the Forum Boarium, the Smithfield of ancient Rome. This gate was excavated by Signor Rosa a few years since (across which he has put a wooden palisade to prevent any one going through it, to carry on the survey of the whole Palatine Hill). This leads to the top of the Zig-Zag, and at the further end of this, at the first angle of the street, is the altar of the unknown goddess, still *in situ*. The next angle brings us behind the round church of S. Theodore, supposed to be on the site of a temple of Vesta. It then passes along the present road under that church, and against the lower cliff or in the wall under the Palatine, the heads of an arcade of the time of the Empire are visible: this part of the road has been raised about 15 ft. The house in which Augustus was born was probably nearly under the Porta Romana, between the round church and the remains of the bridge of Caligula from the Palatine to the Capitol. This house was made into a temple in his honour immediately after the death of Augustus, and we are told that the bridge of Caligula was carried *over it*, which was probably not intended to be taken literally, but that it was close to the side of the bridge, which was at a great height above it. One of the fragments of the marble plan appears to me to agree with this. Augustus next lived for a few years on the Capitoline Hill, by the side of the steps immediately opposite to the house in which he had been born. But after he became emperor, the senate insisted on his

living on the Palatine, as the proper place for an imperial residence. Augustus himself always wished to live as a private citizen only, and although he so far complied with the wish of the senate as to live on the Palatine, he merely bought the house of a private citizen called Hortensius, which we are expressly told had columns of Albano stone only, and was without mosaic pavement or other ornament. In this house we are also told that Augustus slept for the last forty years of his long life. But the senate were not satisfied—they thought this house too mean and poor for the emperor, and they insisted upon adding to it a porticus with mosaic pavement and other decoration. This was an addition made to the same house; the emperor did not change his residence. We are also told that Augustus chose this situation because it was in the Arx, and near to the house of Romulus; the Arx is known to have been the north end of the Palatine, and the house of Romulus was a wooden hut existing in the time of Augustus, in the Arx, near the north-west corner, and near to the place where the Church of S. Anastasia now stands. This is within a stone's throw of the house recently excavated, which I call the House of Hortensius. This account appears to me to agree exactly with the house now found; there is no internal communication between the porticus with the richly decorated chambers, and the older house behind it, which may very well be of the time of Sylla or Julius Cæsar, and therefore standing as an inhabited house when Augustus bought it. We are told, indeed, that there were plain columns of Albano stone, or "peperino" as it is now called. No such columns have been found here; but these would naturally be removed to make way for the richer work to be added to it. These columns were probably rough and faced with stucco painted, as is the case with some remains at Pompeii.

The interesting set of photographs published this season by Signor Rosa, showing these recent discoveries, are unfortunately made entirely from drawings, and he refused me permission to have any photographs taken from nature in his dominions. Photographs can only tell the truth: they would show the real construction of the walls and the junctions in the masonry, and all the details with an accuracy no drawing can equal. The very beautiful fresco paintings which Signor Rosa has found in the chambers are the

finest that have been found anywhere. They surpass even anything found at Pompeii ; and his photographs do not and cannot render them full justice, though they are made from very clever drawings, and have deceived many of the purchasers into the belief that they were taken from nature, which is not the case. I do not wish to detract from the merit of the Emperor of the French in making these excavations, nor of Signor Rosa, who directs them skilfully ; but all archæologists will agree with me in regretting that photographs from nature are not permitted to be taken. One of the reasons assigned by Signor Rosa was singularly unsatisfactory to me :—"He could not allow a photograph to be taken of this beautiful fresco in its present state till it had been restored and varnished." We should all much rather have had it in its original state before it was touched.

I am sorry to be obliged to mention another subject painful to us all,—the demolitions that have taken place during the present season by order of, or with the sanction of, the officers of the Pontifical Government. One of the gateways of the Emperor Honorius, of about the year 400, has been pulled down in order that the old stones of cut travertine might be used as a stone quarry to build the base of the marble column on the Janiculum, to commemorate the present Council. That column was found by Visconti at the Marmorata on the quay, or rather in an old dock, lying horizontally ; and he published a flourishing account of it before he had excavated the whole of it. The length did not equal his expectations ; it is very short in proportion to its diameter, and it was to remedy this defect that the old stone was wanted. The principle is the same as that which was in force when the Coliseum was used as a quarry to build the palaces of the Popes. Another piece of barbarism is the entire demolition of a considerable part of the great *agger* and wall of Servius Tullius, near the Railway Station, to make a new siding to the railway, which might very well have been made in another direction if the engineer, Berardi, had so pleased ; but he was one of those who are entirely ignorant of archæology, and he despised it like other ignorant persons. In this he was supported by his brother, the Cardinal Berardi, the Minister of Commerce and the Fine Arts, to whose department it belonged to give this permission, which was readily granted, although Visconti had been

struggling for ten years to preserve the wall, and had painted large black figures on each of the stones as it was uncovered in order that it should not be moved without his knowledge, and he claimed possession in the name of the Pope, to whom all antiquities belong. But the Cardinal Berardi was his superior officer, and he was obliged to yield. This loss is the more to be regretted, because upon this great bank or *agger* there were the remains of the houses of a street of the first century, with painted chambers, all of which had been carefully excavated by four of the young Roman princes only the year before, at considerable expense. Fortunately they had taken photographs of these, which are now the only records of what was there only a few months since. One of the most interesting fragments of Rome has thus disappeared before our eyes. In the course of the pulling down of the wall of Servius Tullius, we found that the large blocks of tufa had been clamped together with iron clamps, some of which I bought of the workmen. No cement was used.

I will conclude with a few words respecting my explorations in the Catacombs, which I have pursued for the last four or five years with the permission of Signor de Rossi, who has charge of them for the Government. He permitted me also to take photographs of them, the results of which are now in my collection, together with another set from the mosaic pictures in the churches of Rome. These two sets throw great light on each other. The drawing of each century, like the architecture, is always the same, as we know from D'Agincourt's "*Histoire de l'Art par les Monumens*," but we have hitherto had no copies that we could depend upon, of either the fresco-pictures in the Catacombs or the mosaic pictures in the churches; by putting them side by side it is evident that a large proportion of them are of the same periods, the work of the same Popes, whose names and whose portraits are in the mosaic-pictures themselves; and this agrees with Anastasius, who tells us that they restored the Catacombs, and the paintings naturally belong to the last restoration. Whether this discovery of the truth was unpalatable to the authorities or not, I cannot tell, but the last time I saw Signor de Rossi, he told me he was very sorry to inform me that the Cardinal Vicar had forbidden any more photographs to be taken in the Catacombs. The Pontifical Government has also refused

me permission to take photographs in the pagan tombs on the Via Appia, which contain a series of fresco-pictures of the second century, dated by the brick-stamps. The style of these frescoes is so different from the greater part of those in the Catacombs that it is impossible to believe they are of the same period, which would be that of the tombstones of the martyrs. On the other hand the paintings in the Catacombs do agree with the mosaic pictures of the sixth, eighth, and ninth centuries, the time when they were restored.

The shallow pretext for refusing me permission to take any more photographs is, that the light from a lamp of magnesium *may* injure the frescoes, which is evidently *moonshine*. The first person to have one of these lamps in Rome was the Cardinal Antonelli ; and the first place in which he tried it was in the Catacombs. The Cardinal Vicar [Patrizzini] has power to act in the name of the Pope, and he is always considered as an organ of the Jesuit or Ultramontane party, the bigots of the old school.

Other excavations were carried on during the season, not for the purpose of researches, but for practical objects, in which some objects of interest came to light accidentally : one in the garden of the hospital of the Lateran, in which an ancient tufa wall was found, apparently part of the fortifications of the Lateran at a very early period ; another in the Forum Romanum, in making a new drain from the Capitol to the Cloaca Maxima. Here a long piece of the basement of some large building was found in front of the church of S. Hadrian, with the lower part and base of a marble column. This basement passes parallel to the front of the church ; it is mediæval, but the foundation is probably that of a Basilica, or market-hall, of the time of the early empire. A third of these excavations was made in the Piazza Navona, and brought to light some portion of the curve of the circus which is known to have been on that site.



Portrait of Our Lord : a painting after the type of the emerald vernicle presented by Bajazet II. to Innocent VIII. Preserved at Douglas, Isle of Man.

From a drawing and photograph communicated by Miss Wilks, of Douglas.

THE EMERALD VERNICLE OF THE VATICAN.

By C. W. KING, M.A.

No monument of any art could approach in high and holy interest to the one asserted to be preserved in the Treasury of the Vatican, were it possible to give credence to the statement accompanying its pretended copy. This statement, attached to a copperplate engraving, or to a photograph from the same, now commonly to be seen in the London print-shops, runs thus :—"The only true likeness of Our Saviour, taken from one cut on an emerald by command of Tiberius Cæsar, and was given (*sic*) from the treasury of Constantinople by the Emperor of the Turks to Pope Innocent VIII., for the redemption of his brother, taken a captive of the Christians."

But in *this* instance the claims of both prototype (supposing there really to be one) and of copy may be dismissed at once, a single circumstance sufficing amply to disprove them. Any eye slightly practised in art will immediately detect that the character of the design in this head is neither antique, Roman, nor even Byzantine, but bears the unmistakeable stamp of the *naturalism* of the Italian Revival. In fact, if compared with the head of the Saviour in Raphael's "Miraculous Draught of Fishes" (so well known to everybody by its perpetual republication in various forms), it cannot fail to be discovered an exact transcript from that celebrated work. Nevertheless it is probable enough that a real engraved gem (an *emerald*, too, considering the importance of the object to which the material was devoted) may have served for original to the print, and have impudently usurped the honours of a lost predecessor of the same kind. An Italian gem-engraver, working at any period subsequent to the "divine" painter, would of necessity have adopted his conception of the sacred countenance as the most authoritative model he could take for his art. Commissions for religious subjects were commonly given to the greatest

glyptic artists of the Cinque-cento and subsequent schools by their ecclesiastic patrons—witness the elaborate crystal plaques and medallions done to the order of Clement VII. and the Cardinal Farnese by Valerio Vicentino and Castel-Bolognese, of which Vasari has left full particulars in his *Lives* of those artists. And what is yet more cognate to the present subject, the masterpiece of Carlo Costanzi (and which cost him two and a half years of incessant labour¹) executed for Benedict XIV., was an immense table *emerald*, two inches in diameter, having for obverse the head of St. Peter in relief, for reverse the portrait of the Pontiff himself. It was intended to adorn the *morse* or clasp fastening the sumptuous cope worn only at the grand festivals of the Church.

Having thus cleared the ground of a pretender who carries his modern origin so conspicuously impressed upon his face, I will proceed to bring under the notice of our Society another of like nature, but whose pretensions are of a very different order, possessing at least the required character of type, backed by a very respectable and indisputable antiquity to countenance them. This is a painting on panel traditionally re-



ported to have been found in the old convent of St. Bride at Douglas, Isle of Man, degraded to the office of a barrel-lid. Rescued thence the picture came into the possession of Dr. Moore (the rector), who bequeathed it in the year 1783 to the Grammar School-house of that little capital as a most precious legacy, with the memorandum that its counterpart was then preserved at Greystoke in the collection of the Duke of Norfolk. The existence of this interesting picture was recently communicated to me by a local correspondent, Miss Wilks, of Douglas, a lady as distinguished for her knowledge

¹ According to his contemporary, *Ma-en creux du Cabinet du Roi*, pub. 1750, riette, in his "Recueil des pierres gravées

of the antiquities of her insular home as for the intelligent zeal with which she prosecutes the study and preserves the memory of its fast-fading traditions. To her kindness I was indebted for a careful tracing of the outline of the head, fully sufficient to certify the style, a facsimile of the inscription underneath, and the other necessary particulars of the description. The face is shown in profile, with the eyes somewhat bent downwards, the hair golden, the beard short and bifurcated, the upper folds of the drapery white, the lower dark-blue. The type of this portrait is evidently derived from the detailed description of Christ's personal appearance contained in the celebrated letter of Lentulus to Tiberius, first cited by our Anselm of Canterbury :—"A man indeed of lofty stature, handsome, having a venerable countenance, that the beholders can both love and fear. His hair verily somewhat wavy and curling, somewhat brightish and resplendent, flowing down upon his shoulders, having a parting in the middle of the head after the fashion of the Nazarenes. A forehead flat and full of calmness, without wrinkles or any blemish, which a slight tinge of red adorns. The nose and mouth beyond all praise, having a beard, full and ruddy, of the same colour with his hair, not long but forked. His eyes of changeable colour (*variis*) and brilliant." For the further information of such as may happen to possess that deservedly popular book, Walsh's "Ancient Coins, &c., as Illustrations of Christianity," I add that the face in this painting is identical with that on the medal figured by him on Plate I., which latter will come to be considered in another place, inasmuch as its existence appears in some degree to elucidate the subject of our inquiry.

The lower quarter of the panel is occupied by an inscription, here and there obliterated by accident, of which a facsimile, so far as modern print will allow is here given :—

"This Present similitude of our lord an . . . Sauour Jesus Christ imprinted in Amerilde by the Predefefors of y^e Greate Turke and sent to the Pope . . . ente the . . for this cause for a token to redeme . . . his brother y^t Was taken prifoner . . ."

Persons conversant with old English writing will at once perceive that spelling and lettering combine to prove this inscription not possibly later than the reign of Elizabeth, nor, on the other hand, earlier than her father's time. But, as I

am informed, this writing, ancient as it is, presents every appearance of having been *painted over* the original painting, that is, upon the lower part of the bust, obliterated for the purpose. There is consequently proof positive that the picture must be at least three hundred years old, and in all probability very much older : in fact, everything in its appearance would warrant us to refer it to the Italian school of the fourteenth century.

The chief value of this inscription is that it carries back the tradition concerning the emerald Vernicle (*vera icon*), by its own antiquity, to within a century of the date assigned for the first appearance of the gem in the Treasury of the Vatican. The next step is to examine into the *probability* of the story which this inscription records. The historical facts briefly stated are these :—Zizim, son of Mahomet II., having disputed the succession with his elder brother, Bajazet II., being defeated in the great battle of Brousa, took refuge with the Soldan of Egypt, Kaibai, and after a second unsuccessful trial of his fortune, with D'Aubusson, Grand Master of Rhodes, who sent him to France in the year 1482. From France he was conveyed, at his own request, to Rome, in 1488, whither both his brother and the Soldan sent embassies on his account, but with very different views. Bajazet promised the Pope, then Innocent VIII., the large sum of 40,000 zechins annually for the *safe* though honourable keeping of a respected though formidable brother, whilst Kaibai made large presents to the Head of Christendom in the hopes of securing aid from the Franks against his much dreaded enemy the Turk. Onophrius Panuvius, his contemporary, the continuator of Platina's Lives of the Popes, mentions that Bajazet, besides the pension, made the Pope a present of the spear of the Crucifixion (the far-famed lance of Longinus), doubtless regarded at the time by donor and receiver as equivalent to a much larger amount, and which at once, skilfully wielded in pontifical hands, proved to the new possessor the very wand of Hermes. This gift suffices to prove that the recent usurper of the throne of the Byzantine Cæsars found still something left in their old storehouse of relics to dispose of when he chose. Onophrius does not indeed mention this emerald (perhaps because he was sceptical as to its genuineness), yet it is very conceivable that amongst the costly gifts of either Turk or Egyptian

was included an emerald (or plasma, which usually passes for its precious congener in these circumstances), actually bearing the head of the Saviour, and proceeding from the early Byzantine school. These gem-works, when the art was lost to the Franks, regularly figure amongst the presents of the Byzantine emperors to the kings of the West. One of the most valued objects in the *Trésor de S. Denys*, was a large lapis-lazuli engraved with the head of Our Lord on one side, of Our Lady on the other, probably the gift of Heraclius to Dagobert, he being named as the donor of the next article on the list, a silver-gilt reliquary. Now, supposing such a gem to have been received at Rome under such remarkable circumstances, nothing could have been more natural than to account for its origin by applying to it, with very slight amplification, the popular legend concerning Lentulus and his communication to his imperial and inquisitive master, and by making the latter embody the information so received in the most precious material nature could supply.

But there was another and very sufficient cause for assigning the authorship of this emerald to Tiberius. Martinus Scotus (d. 1086) had copied from a certain Methodius the following legend:—"The Emperor Tiberius was afflicted with leprosy. Hearing of the miracles of our Lord, he sent for him to Jerusalem; but Christ was already crucified, and had risen and ascended into heaven. The messengers of Tiberius, however, ascertained that a certain Veronica possessed a portrait of Christ, impressed by the Saviour himself upon a linen handkerchief, and preserved by her with reverence. Veronica was persuaded by them to come to Rome; and the sight of the sacred image restored the Emperor to health. Pilate was then sentenced by him to death for having unjustly crucified the Lord." This Cæsar, moreover, had the reputation, throughout the Middle Ages, of a great connoisseur in gems, like that royal Faustus, the Regent Orleans, seventeen centuries later, of whom he was, in many respects, the prototype. Both had passed the better part of their lives, under the cloud of court disfavour, occupied in the cultivation of "curious arts," astrology, alchemy, and the like; and of both the term of power was equally unlucky, a certain ill fate balking the effect of their wisest measures, until, in despair, they drowned themselves in unrestrained voluptuousness.

It is, however, quite unaccountable to me how this legend of the emerald, most assuredly "*vetus et constans opinio*," came to escape the notice of all writers on the subject of vernicles, not being once alluded to by Peignot in his elaborate essay, "*Récherches sur la Personne de Jésus Christ*," published in 1829; nor by Heaphy in his "*Examination into the Antiquity of the Likeness of our Blessed Lord*," in the *Art Journal*, iv. s. vol. vii., 1861; nor again by the latest writer upon the subject, the author of the article, "*Portraits of Christ*," in the *Quarterly Review*, vol. cxxiii. p. 490, who has evidently taken immense pains to make his researches thoroughly exhaustive.

The medal, to which passing reference was made above, and of which specimens are not uncommon, was in existence as early as the opening of the sixteenth century, for it is described as a most precious antiquity (being supposed contemporary with its prototype) by Theseus Ambrosius, who flourished under Julius II. and Leo X. Passing over the other absurdity of this notion on the grounds of ancient usage, art, and language of the legend, it suffices to point out that its material, *white bell-metal*,² and its *fabrique* being a *sand-cast*, not struck with a die, conclusively declare it to proceed from the century before Ambrosius' date, the period when the manufacture of medals thus produced most especially flourished in Italy. Throughout this period, before the invention of the coining-press, casting in sand from a wax pattern was the sole effectual method of executing those medallions, or, rather, small bas-reliefs, of large diameter and highly-raised designs, the easily produced memorials of the celebrities of the age which have come down to us in such otherwise inexplicable abundance. The medal, therefore, whose sacred antiquity struck Ambrosius with so much awe, can only belong to the generation preceding his own: Gothic art never produced anything of the like nature; and had it originated in ancient times, even those of the Christian emperors of the West (which its style also entirely controverts), it would have been made by a die like the other medallions of the same princes.

Nevertheless the existence of this medal may be fancied

² The same is the material of the famous statue of St Peter, a work of the Quattro cento school—a sufficient refuta-

tion in itself to the Protestant joke about "the christened Jove."

indirectly to support the tradition concerning the emerald of Bajazet. Supposing a new *vera effigies* to have come to Rome in so conspicuous a manner, and with so august a voucher for its authenticity as the Grand Turk himself, it would necessarily excite the highest interest and devotion amongst all who flocked to St. Peter's shrine, and nothing could be more obvious to its wonderfully *intelligent* proprietors than the multiplying the relic (with the spiritual advantages accompanying the sight) by converting its imprint into the popular form of a medal. An analogous instance offers itself in the linen impressions of St. Veronica's far-famed *Sudarium*, still regularly kept on sale at the same temple. The inscription, in the modern Hebrew character, filling the reverse of the medal in question, may be supposed to countenance in some slight degree the conjecture above hazarded as to its invaluable prototype: "The Messiah has reigned, He came in peace, and being made the Light of Men, He lives."

But setting this conjecture aside, there is another important question that must not be eluded, inasmuch as it involves a circumstance which might effectually prevent the recognition of the real emerald by a modern and too-knowing eye, supposing it still to repose in the Vatican cabinet. It is true that the Byzantines, from the very commencement of their empire, were fond of engraving sacred images upon green-coloured stones, substitutes for the too costly *smaragdus*. I have seen amongst others a plasma of such beautiful quality as might well be mistaken for emerald, bearing in relief the Saviour's bust in front face, at the side the sacred initials IC — XC, executed in the highest style to which Byzantine glyptic art ever attained. Nevertheless, there is a possibility of a strange confusion of personages in the giving of the names to such representations. Even that very learned and practical antiquary, Chifflet, has fallen into a singular error in this actual particular. He figures a noble head of Serapis, wreathed with persea-branches, as that of the Saviour crowned with thorns,³ and attributes its origin to the Carpocratian Gnostics, who are *accused* by Epiphanius of making and worshipping similar images. But the *calathus* capping the head would alone unmistakeably declare the

³ No. 111 in the plates to his valuable "Macarii Abraxas-Proteus, seu Apistopistus." Antv. 1657.

presence of the patron god of Alexandria, did not the excellence of the engraving likewise bespeak the best period of the glyptic art, not the offspring of the decrepit ages when the Gnosis flourished. Chiflet calls the material *emerald*, and his word may be accepted in this instance without too much questioning, for the Greco-Egyptians frequently consecrated the most costly produce of their national mines to the embodiment of the conceptions of their gods. Examples in fine ruby as well as emerald have repeatedly come within my own observation. This interchange of personages, however, is facile enough to a beholder paying no attention to the distinctive attributes of the Alexandrine deity. Antique art has stamped the features of Serapis with that expression of profound thoughtfulness and majestic severity so well befitting his special character as Lord and *Judge* of the dead, the very character in which the Saviour came subsequently to be most usually depicted in early Christian work. Compare any of the numerous fine camei extant of the Serapis' head in front face with the better executed examples of the Byzantine Christ, for instance, as portrayed (for the first time) in coinage on the *solidi* of Justinian Rhinotmetus (685-711), and every draughtsman will detect and be astonished at their identity. The latter portrait, however, is said (on what authority I know not) to have been copied from the bronze statue of Christ which stood over the vestibule Chalcé of the imperial palace until destroyed by the great iconoclast, Leo the Isaurian, who has commemorated his substitution of the simple Cross in place thereof by an inscription still (or recently) to be read upon the marble.

Lastly comes the all-important question—Does this paragon of all glyptic monuments anywhere exist, with any probability of ever being recognized?—an object of warmest adoration to devotee and to archæologist alike. Alas! sober consideration compels an answer in the negative. Small chance had it of escaping that worse than “Spartacum vagantem,” the mercilessly ransacking Spaniard at the lamentable sack of the Eternal City in 1527, unless, indeed, by special miracle (like that which protected the vernicle of Edessa) it should have had the good luck to be amongst the precious stones from St. Peter's Treasury, which Cellini assisted the Pope and his confidant, Cardinal Cornaro, to

sew up in their own robes when starved into surrender out of their last stronghold, Castel Santangelo.

The quantity of these jewels may be guessed from the two hundred pounds weight of gold which the voracious chronicler avers he obtained from melting down their settings.

Nay, even the last chance (on which I had once confidently reckoned, hoping against hope,) has finally disappeared. Clement, restored to the ruins of his power, *might* be supposed to have replaced the emerald, so cleverly rescued by his Florentine astuteness, within the gem casket of the Vatican—a collection which, during the peaceful interval between the Constable Bourbon and the Emperor Napoleon I., had through the perpetual favors of Fortune (so propitious at this her ancient seat), grown to such dimensions that its catalogue, drawn up by Visconti at the beginning of this century, filled two folio volumes. But over the fate of this cabinet there hangs an impenetrable mystery. It is not visible in any part of the public gallery; and when, some few years back, a learned and sagacious friend, being engaged upon the MSS. of the Vatican Library, made careful inquiry about it at my request (for this special object), none of the officials could give him any information, or were aware that any such collection had ever existed in the place! And yet this cabinet contained, amongst numerous gems of “great volume,” as Visconti expresses it, the largest cameo in the world, the Carpagna, “The Triumph of Bacchus and Ariadne,” a piece whose magnitude was surpassed by its artistic worth, and so well known by repeated publication in previous times, that wherever it went its recognition could not be avoided. It is, however, not impossible that in the troublous times speedily following Visconti’s labours, the cabinet was put away so carefully that the place of deposit had been lost to the next generation of keepers, as was actually the case here for more than fifty years with the better-known Marlborough gems. But there is another solution of the difficulty, and, I fear, the true one. When the Vatican statues were transferred to the Louvre, no notice can be found of the gems having accompanied them upon their enforced journey; they, therefore, may have been appropriated as perquisites by the French Commissaries. In those days, when the gem mania raged so furiously, the

temptation to such an exercise of the law of might was almost irresistible ; and a very unanswerable reply to papal remonstrance would be found in the repetition of the old Gallic hint,—“ *Vae victis.*” It is well known how French authorities, putting taste before religion, carefully despoiled the shrine of St. Elizabeth, Marburgh, of every antique gem with which it was studded, but honestly left untouched all its gold and precious stones. These remarks upon the disappearance of the Vatican Cabinet are appended here in the hope of eliciting, from any parties better informed about its fate, that explanation which I have long laboured ineffectually to obtain. But to return to the Douglas Vernicle : its existence in Man has been plausibly accounted for by supposing it brought thither by T. Stanley, the last Catholic occupant of the see. During his sequestration and detention in London under Edward VI., he was on intimate terms with the Norfolk family, then in close relation with the Court of Spain, and therefore in the way of obtaining similar relics. A second example, bearing the same inscription, but slightly varied and modernised, which now hangs in the sub-librarian’s room in the Bodleian Library, was presented by Mrs. Mary Prince (1722), “painted by herself,” a copy doubtless of some older work. The current story that a third exists in the Provost’s Lodge, Trinity College, Dublin, has proved, upon inquiry, totally without foundation.

THE ROMAN COFFIN AT WESTMINSTER ABBEY.

SOME SUPPLEMENTARY NOTES ON ITS CONTENTS AND ITS DECORATION.

THERE occur certain special particulars in regard to the coffin of Valerius that seem to claim some careful consideration. We are much indebted to so obliging and intelligent an eye-witness as the author of the circumstantial relation of the discovery. It has been stated by Mr. Poole, that with the cranium and bones there lay fragments, as believed, of Roman brick, a portion also of a millstone of the dark grey trachyte or volcanic rock of the shores of the Rhine, quarried chiefly near Andernach, the Roman *Antonacum*. These stones, of which the broken remains constantly occur on Roman sites in Great Britain—in stations *per lineam valli*,¹ in Scotland also, and in all parts of the country where Roman vestiges exist—were chiefly obtained from Niedermennig; they are noticed by ancient authors as Rhenish millstones, and doubtless are such as were designated by Ovid, on account of their peculiar color, *puniceæ rotæ*.² The deposit of a piece of such volcanic stone within the coffin might have been regarded as accidental, had not similar discoveries occurred accompanying Roman burials or sepulchral memorials, in British barrows also, and in certain early burial-places of other periods. In a group of Roman sarcophagi brought to light at Bath, near a branch of the *Via Julia*, as described by Canon Searth, the lower stone of a quern was found adjacent to a stone coffin that contained the remains of a child.³ Mr. Thomson, in his addition to Stuart's Roman Antiquities of Scotland, has recorded the discovery, in one of the Stations on the Wall of Antoninus, of a mortuary tablet commemorating a soldier, and now in the Museum of the Scottish Antiquaries, upon which lay a millstone of very black color, similar to those from the volcanic quarries of Andernach.⁴ I am indebted to Professor Rolleston for pointing out several remarkable instances of the occurrence of such relics in early interments. In a memoir on an ancient cemetery near Abingdon, recently published in the *Archæologia*, he describes the finding of fragments of volcanic rock in the grave of a child, and on another occasion in that of a woman,

¹ See Dr. Preece's notice of their frequent occurrence, *Roman Wall*, p. 438, third edition.

² Ovid, *Fasti*, vi. 318. A perfect stone of this kind, found in London, is figured by Mr. Roach Smith, *Roman London*, p. 143. Another perfect example, in the Museum at Orleans, may be seen in his *Coll. Antiqua*, vol. iv. pl. xi. The

Rhenish mill-stones are still exported to England, Russia, the East and West Indies.

³ *Proceedings, Somerset Arch. Soc.*, 1854, p. 56. See also *Arch. Journ.* vol. xi. p. 408.

⁴ *Caledonia Romana*, by Robert Stuart; second edit., by David Thomson, p. 358, note.

ascribed to the Anglo-Saxon period. He considered these portions of lava as having been brought, in all probability, from Niedermennig; they might, he observes, have been thus deposited as fragments of millstones, implements of daily life.⁵ Professor Rolleston had likewise received from Mr. Wickham Flower pieces of identical character found in a British barrow at Thetford, and near a barrow in Norfolk. He informs me that similar deposits of volcanic tufa in graves have been recorded by the German archaeologist, Schaafhausen.⁶ A remarkable instance of the occurrence of millstones in an interment at Winster, Derbyshire, is recorded by Mr. Bateman.⁷

Whatever may be our conclusions in regard to the coffin—the periods to which we should ascribe so perplexing an object, its contents, also, and the cross-slab that now covers it,—the remarkable facts brought under our consideration by Professor Rolleston must be received with interest. Not the least, indeed, of the points of difficulty connected with the first discovery of any Roman vestige on the “Isle of Thorns” consists in this anomalous circumstance, that whatever may have become of the original occupant of the *ossuarius*, transferred probably from one of the Roman cemeteries around Londinium—from Bow, or Moorgate, or some site described by Mr. Roach Smith in his *Illustrations of Roman London*,—certain minor relics, seemingly of undoubted Roman character, should have been suffered to remain within the ancient depository.

With these, however, another peculiarity occurred, as noticed in the memoir by the Dean, that seems in a remarkable manner conformable to certain mortuary usages of Roman times in Britain. There were, according to the description received through the kindness of Mr. Poole, the abbey mason, several masses of a pasty substance, like lumps of quick lime which time had slaked and made into a paste. Probably, Mr. Poole observed, the floor of the coffin had been strewed with lime. Future investigation may explain the introduction of lime and other substances thus strewed under or around the corpse in Roman interments. Several remarkable instances of the practice have occurred in this country. Amongst the vestiges of Roman London may be cited a discovery of a coffin of freestone brought to light, in 1865, at Bow. According to Mr. Franks' description the bones were covered with fine mould that may have infiltrated; and at the bottom of the coffin there was a layer apparently of lime.⁸ Similar deposits had been previously found elsewhere, on Roman sites. In 1842, Mr. Clement T. Smythe communicated to the Society of Antiquaries a notice of a Roman cemetery at Sutton Valence, near Maidstone, in which a stone cist had been found, as described in the *Archæologia* (vol. xxix. p. 422), the bottom of

⁵ *Researches in an Ancient Cemetery at Frilford*, *Archæologia*, vol. xlii., pp. 441, 470.

⁶ *Die Germanische Grabstätten am Rhein*, 1868, pp. 122, 127.

⁷ *Ten Years' Diggings*, p. 98; see also *Horn Fosses*, p. 104. The two stones of the quern, which was of the millstone grit of Derbyshire, were found apart, accompanying two contiguous burials, one with each deposit. In one of these the moiety of the hand-mill had

been exposed to a strong fire, with weapons and other objects, and the corpse laid on the ashes, but apparently not burnt. Mr. L. L. Jewitt, who has figured the quern in his manual entitled “*Grave-mounds and their contents*,” p. 295, considers the interment to be Saxon, and observes that portions of grinders or triturating stones are occasionally found in the burial-mounds of various periods.

⁸ *Proceedings Soc. Antiqu.*, second series, vol. iii. p. 124.

which was strewed with quick lime. Gough has described several cists disinterred outside the Station at Great Chesterford, Essex, in which all the remains were incrustated with a white substance like plaster of Paris.⁹ The occurrence, in 1760, of several coffins at York, in which the bodies were laid in lime, the skeletons being firm and entire, is recorded in the Minutes of the Society of Antiquaries.¹ Several other Roman coffins containing lime were subsequently brought to light near the same spot, outside the walls of York; in three instances it appeared that liquid plaster had been poured over the corpses, of which casts or impressions had thus been formed, in which personal ornaments were imbedded, and even the texture of the clothing is distinctly visible. These remarkable examples of a peculiar mode of Roman burial are preserved in the Museum of the Yorkshire Philosophical Society.² Similar interments, probably of the same period, had likewise occurred in Hertfordshire.³

It had been supposed that the substance employed in the tombs at *Eburacum* was lime. Analysis, however, recently made by Dr. Procter of York, has proved that in the majority of these remarkable deposits, if not in every instance, it is gypsum (sulphate of lime). A sample of the calcareous paste from the coffin at Westminster having been submitted to him, through the kindness of the Rev. John Kenrick, it proved to be carbonate of lime, with rather a large proportion of phosphate of lime, which may have been derived from mixture with disintegrated bones.

These facts seem deserving of consideration, although they may fail to suggest satisfactory conclusions, or even to aid our investigation of the mysterious subject of these remarks. As regards the mortuary usage to which I have last adverted—the bed of lime or of some absorbent or anti-septic substance strewed under the corpse—the discovery of Roman coffins at Bath, in which the corpses had been laid on fine sand, in one instance of a kind supposed to have been brought from a considerable distance, claims notice.⁴ It will not be irrelevant to the subject under consideration to advert to the singular precaution, for some preservative purpose, probably, noticed by Mr. Octavius Morgan in a Roman interment at Caerwent. A stone coffin, in which another of lead was enclosed, was found within a grave or cist formed of slabs set edgewise. The intervening space around the sarcophagus was filled in with small coal tightly rammed; the leaden depository in which the skeleton lay was full of clear water, with some ochreous sediment.⁵ On the Continent the introduction of lime in Roman or early interments, on the disuse of incineration, about the third century, although it seems rarely to have been noticed, has occasionally occurred. M. Jouanmet, in his researches in a very extensive cemetery near Bordeaux, has described a burial in a coffin, in

⁹ Sep. Monum., *Introd.*, vol. ii. p. ix.

¹ Vol. viii. p. 273; Wellbeloved's *Eburacum*, p. 109.

² Wellbeloved, *ut supra*, p. 108; and Descriptive Account of the Museum of the Yorkshire Philosophical Society, fifth edition, 1869, p. 76.

³ In the Bury, near Ware, several stone coffins were found in 1802; they are figured *Gent. Mag.*, vol. 72, part i. p. 393, with an account of the discovery by Gough; in three of these lime oc-

curred. These were probably Roman interments; a coin of the Lower Empire lay near them. The coffins lay, however, east and west. Gough describes, *ibid.*, another coffin found near Dartford Brent, containing the remains of a young female imbedded in white plaster, that retained the impression even of the features of the face.

⁴ *Journal Brit. Arch. Ass.*, vol. for 1861, p. 232.

⁵ *Arch. Journ.*, vol. xii. p. 76.

which the corpse had been placed on a stratum of "*mortier*," about 2 in. in depth, surrounded by the vases commonly there found accompanying interments by cremation.⁶

At the scientific congress held at Lyons, in 1841, the Abbé Croizet described the discovery of eighty sarcophagi in the department of Puy-de-Dôme. In one of these lay a skeleton wrapped in linen, and covered with three layers, namely, of earth, lime, and charcoal, successively. The corpse had been placed on green and red clay, and aromatic herbs; rosemary and camomile were identified.⁷

I will only add that I have sought in vain for any instance of the like use of lime in Mediæval interments. Having consulted a friend, profoundly conversant with ancient mortuary practices, Mr. M. Holbeche Bloxam, he assures me that on no occasion has any calcareous stratum within a coffin of the Middle Ages come under his observation. He reminds me of a somewhat similar use, at a comparatively recent time, of an absorbent layer of bran. Claude De la Croix, in "*Le Parfait Ecclesiastique*," published in 1666, gives the following instruction in regard to the burials of priests:—"Dans le fond du cercueil il est à propos d'y mettre du son vers le milieu, afin que, si le corps se vuidoit, le son le put arrester; on y peut aussi mettre des herbes de senteur." Mr. Bloxam, however, has made known to me an instance of the mediæval use of sand, as related to him by Mr. Albert Hartshorne. It occurred in the grave of an archdeacon of Norfolk, William Sponne, interred in 1448 at Towcester, Northamptonshire. In 1835 the tomb with his effigy being lowered, the skeleton was exposed to view, in most perfect preservation, every bone being in place; it lay upon a bed of fine white sand.

In the examination of the *arca* or mortuary cist at Westminster, a feature of no slight value and interest is presented by the ornaments resembling the Parthian shield, that occur at each end of the panel in which the inscription is framed. These lunated shields, it may be observed, recall the numerous sculptures of the Antonine period, occurring in remarkable variety along the course of the Mural Barrier in Scotland; whilst the beautiful outlines and precision of the lettering on the coffin of Valerius would doubtless suggest to the eye critically skilled in epigraphy, that the inscription might safely be ascribed to the same period. On the Westminster coffin these ornaments, of which the form was doubtless suggested by that of the lunated *pelta*, are enclosed in small panels or compartments, of which the framing-margins are plain,—not worked with a finely-cut moulding, as in the frame-work of the panel that surrounds the inscription. It has been questioned whether the Parthian shield was really the motive that may have suggested a decoration, possibly, as has been imagined, merely capricious, or at least not associated with any direct military allusion. This must be left for future consideration and comparison with sculptured monuments of like character or period that may be found on the continent. It will be seen that each of the *pelta* on the coffin found at Westminster has, as the *umbo*, an ornament that bears resemblance to a fleur-de-lys; in some other examples the trilobate fashion of the boss is even more distinctly marked; on a fragment of a Roman frieze found at *Claesentum*, the boss

⁶ *Mémoires de l'Académie de Bordeaux*, published in 1839.

⁷ *Gent. Mag.*, vol. xvi., N. S., p. 528.

of the shield-like ornament has the precise form of the fleur-de-lys.⁸ Other examples of this occur. In several instances, as already mentioned by the Dean of Westminster, and especially on monuments that occur on the line of the Mural Barrier of Antoninus (c. A.D. 140), the extremities of the curves present eagles' heads, and in other instances roses or flowers; of these an admirably worked specimen is found in the slab disinterred at Carriden, Linlithgowshire, and now in the Museum of the Society of Antiquaries at Edinburgh. It is a legionary tablet inscribed to Antoninus Pius, its date being probably between A.D. 139 and 161.⁹ It is not needful to enumerate many examples of this lunate shield on Roman monuments in North Britain, Northumberland, and Lancashire; they have been figured by Gordon, Horsley, and Stuart; and more faithful representations will in many instances be supplied by Dr. Collingwood Bruce, in his *Lapidarium Septentrionale*. He has reminded me of a noble tablet inscribed by a cohort of the Gauls; it was found at Risingham, and is now at Trinity College, Cambridge.¹ Dr. Bruce figures another example, rudely carved, that claims notice; it was found at Netherby, and may be assigned to the reign of Elagabalus, in his second consulate, A.D. 219. The extremities are here fashioned as eagles' heads.² It may deserve notice in the *pelte* on the Westminster coffin that on the round ornaments of the trilobate bosses the compass points, from which the circles were struck, may still be seen, as also a fine marginal line round the outline of the curves that adjoin the inscribed panel. These minute evidences of very careful workmanship are not unworthy of consideration in connection with the remarkable perfection and technical skill shown on the face of the sarcophagus, not less than in the admirable forms and finish of the letters, of which the delicately cut elongated serifs, with the regularity in spacing, are perhaps scarcely surpassed in any inscription that has occurred in Great Britain. It is probable that frequent instances of the lunated shield might be found on continental monuments. It occurs on a remarkable Christian sarcophagus at Autun, that has been figured by Mr. H. F. Holt in the *Journal of the British Archaeological Association*; in this instance the *umbo* assumes the appearance of a fleur-de-lys; the lateral tablet is uninscribed; the ends of the coffin are round;³ the massive lid is conformable in shape to that of the *arca*; it is likewise rounded in all directions, not ridged; there is, however, some rib or ornament, not distinctly shown in the engraving, extending along the great part of the summit; and on one of its sides appears, within a circle or garland, the Christian monogram (Chi and Rho) with

⁸ It is figured, *Journal Brit. Arch. Assoc.*, 1857, p. 210: Transactions at their Winchester Congress, p. 166.

⁹ *Proceedings Soc. Ant. Scot.*, vol. viii. p. 109, pl. vii. This tablet is possibly the finest relic of Roman work, of its class, hitherto found in Britain.

¹ Figured, *Arch. Journ.*, vol. xii. p. 213; Bruce's *Roman Wall*, third edit., p. 333; a remarkable tablet found at Launceston is there also figured, p. 347; it bears a garland flanked by *pelte* held by winged genii. On several monuments the original type of the shield seems to

be lost; the ornament assumes the character of a rudely curved capricious decoration at either end of the inscribed panel. Compare Bruce, *ut supra*, pp. 298, 369; *Lapidarium*, pp. 35, 68.

² This a dedication by vexillations of the second and the twentieth legions. *Roman Wall*, p. 412.

³ This form of the Roman coffin is not common. An example, found at Binstead, Hants, is of greater width at the head than at the foot, which is rounded both externally and within. *Arch. Journ.*, vol. xi. p. 12.

the alpha and omega, on either side a bird perched on a branch, and a richly ornamented Latin cross. This tomb is of marble; it was found near the abbey of St. Symphorien, at Autun, and has been ascribed to the "first Christian Period."⁴

The discovery of the memorial of Valerius has suggested questions of more than ordinary interest, perplexing as they are, in certain details, even to those most versed in the history of mortuary usages. It is, doubtless, in the coped covering and in the Christian symbol conspicuously thereon displayed that we find the feature of highest importance and difficulty. If it were possible to demonstrate satisfactorily that these may be regarded as coeval with the inscribed memorial, the recent exploration at Westminster would indubitably present a monument unequalled perhaps in archaeological value by any relic brought to light in this country in our days. Such indeed, in regard to the character and date of the cross-slab has, I am informed, been the opinion of one of our most acute and energetic investigators of Roman remains in Britain—the Explorer of Silchester. Having been deprived of the privilege of listening to the arguments adduced by Mr. Joyce, in a discourse received by the Institute with most marked gratification, and being insufficiently acquainted with the evidence that has influenced his conclusions, I would here express any notions of my own with much deference to an opinion grounded on ample research. I anxiously await the promised publication of his memoir on a question to which no English antiquary can feel indifferent.

The supposition, on the other hand, that this remarkable symbol of Christian Faith in this instance combined, as Mr. Joyce is disposed to conclude, with that of the Anchor, has not found ready assent with certain archaeologists who have devoted attention to the conventionalities of sepulchral memorials during mediæval times. The low coped covering of the coffin at Westminster, although comparatively rare, is not without precedent amongst grave-slabs of the twelfth century, and still earlier times. In its ridged form may be traced a tradition of Roman type that speedily was lost in the flat grave-slab with which we are most familiar, forming part of the level pavement, and thus modified, no doubt, for obvious requirements and convenience. It is scarcely needful to allude to the multiplicity of designs that occur on mediæval cross-slabs, bearing, in some instances, ornaments in low relief, but more commonly incised, frequently of great elegance in artistic design. In this capricious variety the cross, sometimes almost lost in a profusion of complicated accessories, is, with few exceptions, the conspicuous symbol. It is, however, remarkable that almost invariably the cross is of the Greek type, the long shaft being surmounted by a circular or wheel-shaped head, in which, however elaborately floriated or otherwise enriched, the cross of four limbs of equal length is the motive that may readily be recognised. The Latin type is comparatively rare, both in wayside or other erect crosses, in this country, and also on grave-slabs. Examples are, however to be found. To these it may be desirable to advert, because it has, I believe, been suggested that the long shafted Latin cross with limbs pattée, of equal length, and

⁴ *Journal Brit. Arch. Assoc.*, 1870, pp. 61, 67. This very curious Christian tomb, it is believed, is copied by Mr. Holt

from one of the numerous publications by M. de Caumont.



Grave-slab of Barnacle ragstone at Howell, Lincolnshire. Length 6 ft. 5 in. Breadth, at the head, 1 ft. 6 in., at the foot, 1 ft. 5 in. Thickness $10\frac{1}{2}$ in.

From a drawing by the Ven. Archdeacon of Stow, F.S.A.

bearing resemblance to the cross occurring on reverses of Roman coins of the fourth or fifth century, is very rarely, if ever, found in Middle Age monuments. I may cite two coped slabs at Repps and Bircham Tofts, Norfolk, that may be ascribed to the eleventh or twelfth century: each bears a Latin cross, of which three of the limbs are dilated or pattée; the long shafts spring from singularly formed terminations at their bases.⁵ The best example, however, known to me is here figured, through the kindness of Archdeacon Trollope, who states that it was lately found at Howell, near Sleaford, Lincolnshire, where it had long been used as a little bridge over a ditch adjoining the churchyard, the carved side being placed downwards. It bears three Latin crosses, of similar type, the limbs having dilated terminations; the shaft of the central cross springs from a tripod base. Two crosses, of smaller proportions and probably commemorating children, are remarkable as indicating, doubtless, the resting-place of several members of a family. The date is ascribed by the Archdeacon to the twelfth century, the period to which, according to some archaeologists who have given special attention to such memorials, the cross-slab on the Roman sarcophagus at Westminster may probably be assigned. The interesting example found in Lincolnshire is here figured from a drawing by his accurate pencil.⁶

The like type of Latin cross, although comparatively uncommon, is exemplified likewise by certain other mediæval relics, such, for instance, as wayside or churchyard crosses. It may suffice to cite a remarkable mural painting, brought to light in 1868 in the church of Wisborough Green, Sussex, in which is to be seen a figure of St. James, as a pilgrim, holding a long-shafted cross, the three upper limbs of which are pattée, the lower extremity is pointed.⁷

The termination of the cross upon the coped lid of the sarcophagus at Westminster is unfortunately so greatly damaged that it is difficult, perhaps impracticable, to ascertain, beyond controversy, what may have been its precise fashion. In the representation previously given with the memoir by the Dean of Westminster, the utmost care has been bestowed by Mr. Utting in his reproduction of the trilobate ornament, and I have been unable, after very minute examination, to re-establish any more reliable outline of the defaced design. Mr. Kenrick, in a discourse on the sarcophagus delivered before the Yorkshire Philosophical Society, pointed out the resemblance of this trilobate decoration to that of one of the cross-slabs at Chelmorton Church, Derbyshire, figured in this Journal, with notices of that fabric, by Mr. Sprengel Greaves.⁸ To this suggestion I am disposed to assent; the outline is, however, somewhat more floriated, and the lateral foliations are more extended than in the Westminster cross; but the type, so far as the foot of the shaft is concerned, seems very similar. Another example of the like trilobate foot occurs at Bake-well, and has been ascribed to the twelfth century.⁹

⁵ Arch. Journ., vol. iii. p. 268. A slab with a Latin cross, the limbs fleur-de-lisées, exists at Brougham, Westmoreland, *ibid*, vol. iv. p. 59. Three or four other slabs with crosses of Latin type may be found in Mr. Cutts' Sepulchral Slabs.

⁶ The under side of the slab is left quite rough, and the Archdeacon observes that it may have been intended to

be placed over the grave, and not used as a coffin-lid. The nick or groove at the foot is probably not original.

⁷ Sussex Archaeological Collections, 1870, pp. 134, 140.

⁸ Arch. Journal, vol. xxvi. p. 262, fig. 7.

⁹ Manual of Cross Slabs, &c., by the Rev. E. L. Cutts, pl. xl. The capricious

We have been much indebted to the careful observation and practical knowledge of Mr. Poole in regard to many suggestive details, the value of which no one else could so fully appreciate. His remarks on the irregular fashion and inferior workmanship of the lid, as compared with the skilled execution of the coffin of Valerius, cannot fail to suggest the inference that the clumsy covering stone is of a later period, possibly not earlier than the twelfth or earlier part of the thirteenth century, as some have imagined. On these points, and they are of considerable interest, I hesitate to express any conclusions. Mr. Scott informs me that on comparing, with care, the coped coverings of the massive Roman coffins found at York, he is of opinion that such a cross as is found on the Westminster relic might readily have been carved in after times on the coped surface of a slab of such massive proportions.

It is doubtless possible that the coped lid, of Roman fashion, and of the same oolitic stone as the *arca* itself, however deficient in precise conformity of fashion, may have been of the same age and origin, transported also together from one of the ancient cemeteries around the Roman city to supply the secondary requirements of some interment within or adjacent to the fabric raised by the Confessor, and of which unfortunately so few vestiges have hitherto been traced. Future investigations may determine whether any portions of the ancient foundations brought to light near the sarcophagus, and so carefully planned by Mr. Poole, may have been of the earlier constructions; at present we look in vain for indications that would suggest any satisfactory conclusions as regards the precise period of the secondary deposit or the personage interred. If we should be disposed to imagine, from the fashion of the cross, in which antiquaries not unskilled in such questions have recognised the character of the twelfth century, that the pagan depository may have been brought to Westminster about that time,—either a new slab having been placed upon it, or the Christian symbol carved upon the original covering,—it may seem deserving of consideration that in the twelfth century a remarkable innovation had occurred in the mortuary usages of one of the principal Benedictine monasteries around the metropolis, that would doubtless be more or less generally followed in other establishments of the same order. Garinus, who succeeded as abbot of St. Albans in 1188, and died in 1195, ordained that interments, in all previous times made under the turf only, should thenceforth always be in sepulchres of stone, which appeared to him more seemly. Such deviation from the simple practice of earlier times appears to have given grievous offence to the sacrist, whose functions included the provision for an onerous extravagance that was inadequately supplied by some slender augmentations.¹

These facts obviously suggest the probability that at the close of the twelfth century these costly *loculi* of stone may have been in increasing demand and sometimes not to be readily procured. The ancient monastic burial place of Westminster was within the cloisters. It seems, however, no improbable supposition, considering also the peculiar connection of the monastery with the palace, that on the northern side of the church a resting place may have been sought for some person of note, whether

variations in these materials are endless. Compare the much enriched foliated base, pl. xv.

¹ See the new Statutes of Abbot Warin. Matt. Paris, Hist. Major, c. lvi. Wats; Vita S. Albani Abbatum, p. 95.

secular or religious it were hopeless to inquire, and that, through some emergency of the occasion, the depository inscribed by the filial piety of the Valerii became appropriated anew to another occupant, and hallowed, so to speak, by the sacred symbol that it now bears.

Whilst the foregoing observations have been in the printer's hands I have received, through the kindness of Mr. Wylie, communications on the sarcophagus by the Padre Garrucci, whose critical knowledge of the various questions involved in the inquiry is well known to the student of palæography, and also of Christian antiquities of every description. The substance of his letters have subsequently been published by the Society of Antiquaries in their Proceedings, vol. iv., second series, p. 468. The grounds of his conclusion that the inscription can only be assigned, at the latest, to the first half of the third century, and that the date cannot be carried much further back than the time of Caracalla, who was slain in 217, may there be found fully detailed. His observations on the type of the cross claim careful consideration; he remarks that "we must necessarily infer that the sarcophagus, with its lid, was used a second time, at a late period, and that the cross was then sculptured upon it."²

ALBERT WAY.

² See in the same volume, p. 409, a brief notice of the discovery of the coffin.

NOTICE OF CIRCLES OF STONES IN THE PARISH OF
CROSBY RAVENSWORTH, WESTMORELAND.

By R. H. SODEN SMITH, M.A., F.S.A.

IN Crosby Ravensworth parish, Westmoreland, my attention was recently called by the Rev. G. F. Weston to a circle of stones, or rather traces of three concentric circles, such as are commonly known by the name of "Druid circles," and respecting which a few notes and measurements, made with the assistance of H. F. Church, Esq., a member of our Institute, may be of some interest.

I am the more urged to put on record what we observed on account of the risk to which all such ancient monuments in outlying and comparatively unfrequented districts are exposed from the ignorance of the inhabitants. In the parish of Ashby, immediately adjoining, a road-contractor permitted his workmen to commence breaking up the stones composing a large and fine cairn, and the whole would have been destroyed and carted off had it not been for information given to Mr. Weston, who promptly appealed to the owner of the land and had this act of Vandalism stopped—not, however, I regret to say, until about one-third of the structure had been demolished.

The circle to which I now propose to call attention is situated in the south-east corner of the parish of Crosby Ravensworth, within a short distance of Ashby parish. It stands on the south-west slope of a hill, at an elevation of about 1,000 feet above the sea-level, on a wild rocky moor or sheep-walk, and as it may be well in inquiries of this nature to take some note of the character of the rocks in the district, I may mention that the circle of stones rests on what is known as the Orton Scar limestone, the surface of which crops up in many places through the meagre covering of shallow soil. Above this, higher on the hill, appears a narrow stratum of yellowish sandstone; this sandstone

weathers to a hard surface, and is known by the workmen in the neighbourhood as bastard freestone ; beyond, and overlying it in a northerly direction, are strata of a hard blue limestone, locally known as winter tarn limestone, and beyond that again is a belt of clay shale.

The stones composing the circles, as well as the outlying structures presently to be mentioned, are all sandstone derived from the stratum, which, as we have seen, crops out higher up the slope of the hill, distant about 115 yards, but they rest almost immediately on the beds of natural limestone rock.

The stones have all fallen or been thrown down, but do not appear to be much displaced, each from its original standing-spot. They are generally not above 2 ft. 6 in. in length, unhewn and quite irregular in form, so that it would be scarcely possible to know the exact posture in which each originally stood. There appear, however, to have been three concentric circles, the outer about 60 ft. in diameter, according to the most accurate measurement we could make, the inner about 30 ft. The stones have stood close together, and it is difficult now to discriminate between those composing the various circles, or to state precisely what was the original number of the whole. Some, half-buried by the soil and weathered in the lapse of ages, can scarcely be distinguished from what may be mere fragments ; the smaller stones, moreover, are mingled with those that appear to have been used in supporting the larger erect pieces that especially composed the circles. Perhaps about 150 of the larger size have been employed in the structure of the concentric circles.

In the centre are some stones remaining, rather smaller than the outer ones, but similar in material, and also irregular and undefined in form ; no order is traceable in their arrangement, and they appear to have been displaced and perhaps broken ; they do not now present the appearance of design such as is recognizable in the position of the central stones of other circles existing in this neighbourhood.

A line of fallen stones stretches away from the edge of the outer circle up the hill, in a N.N.E. direction, for a distance of 112 yards, and at present terminates in a large flat piece of sandstone of irregularly angular form, 6 ft. long by 4 ft. 7 in. at the larger end, and 2 ft. 10 in. at the smaller.

This line of stones seems to have been originally composed of a double row, standing up like those composing the circles, and thus they would have defined or edged a long narrow path, perhaps 3 or 4 ft. wide, leading to the circle.

Besides this remarkable line of stones, which, to the best of our observation, certainly seems to be of the same character of structure and period as the circles, there is, in an easterly direction, at the distance of 10 yards from the latter, a small group of stones at present irregular and apparently disarranged. Also, at the distance of about 9 yards, in a S.E. direction, is another small group of similar stones, disarranged, but still, like the former, distinguishable as an artificial structure by their position, as well as by the nature of the stone—sandstone, which, as I have already observed, must have been carried to its present site from its native beds in the hill some distance higher up.

Whatever may have been the purpose of these small outlying groups of stones, they appear to have some relation to the circles, and are, in all probability, the work of the same people and period. I have not found in the other remarkable circles which I have had the opportunity of examining with Mr. Weston in the same district, any indication of such outlying groups, nor of the long line of stones stretching away from the circles.

I may mention, however, that Dr. Stukeley says that he saw, in 1725, at Shap, a temple formed on the design, as he describes it, of the circle and serpent; and he alludes to another at Classernish, in the island of Lewis.¹

I need scarcely remind antiquaries that such lines of stones in connection with circles, on a very grand scale indeed, exist at the great monument at Carnac in Brittany, and did exist at Avebury in Wiltshire. If there be any analogy between this ancient circle, with its connected structures, and the vast and notable works to which I have alluded, the interest of this almost unknown monument in Westmoreland is greatly increased. I have not had the opportunity yet of studying the Carnac remains. Judging from plans and descriptions of them, and from what I was able to observe in a

¹ *Itin. Curiosum, Iter Boreale*, p. 42. A circle of stones, forming a portion of the great avenue at Shap, was destroyed in 1744, during the construction of the

Lancaster and Carlisle Railway. It has been described and figured in the *Gentleman's Magazine*, vol. xx., N. S., p. 381.

recent visit to Avebury in Wiltshire, there would appear to be a relation of origin, design, and workmanship between this lesser structure and the gigantic labours of the forgotten race who reared perhaps Carnac, Avebury, and Stonehenge.

Besides this circle there are numerous other remains of interest in the same district; a circle at Gunnerkeld in Shap parish, a circle in Orton parish, a circle at Oddendale,—a smaller circle now intersected by a wall on Shap Common.²

Various tumuli exist within a small circuit in Crosby Ravensworth and neighbouring parishes. We opened two of these. In one, which had no doubt been disturbed previously, we found a few fragments of bones and some human teeth, with bones and teeth of rats; in the other, on Gathorn Plain, was a kist-like structure of rough, flat stones, but we found no remains of any kind.

² In the Proceedings of the Society of Antiquaries of Scotland, vol. iv. p. 443, may be found notices of circles of stones at Gunnerkeld and Gannelius, and also of various remains of the same description near Shap, by the Rev. James

Simpson, an antiquary to whom we are indebted for a valuable memoir on the Antiquities of Shap, read at the meeting of the Institute at Carlisle, and published in this Journal, vol. xviii. p. 25.

Original Documents.

SURVEY OF THE ABBEY OF ST. MARY DE PRATIS, NIGH LEICESTER, TEMPORE HENRY VIII.

Communicated by Mr. J. BURTT, Assistant Keeper of the Public Records.

THE ruins of this once important and very interesting establishment are in a very unsatisfactory condition to the antiquary. Without going into the question of the "why" or "wherefore" of the great change in the sixteenth century, which ruthlessly swept from the surface of the land the establishments which the piety and religious feeling of our ancestors had planted on so many a fertile spot and among such picturesque scenery, the intelligent inquirer into the earlier condition of our country loves to be able to trace the true outlines of such structures when wandering among their ruins; to know the exact site of the sacred building in which public worship was performed, and to be tolerably certain of the appropriation of the locality to the domestic comforts and the social needs of the institution.

Several of the religious orders followed precise rules in the arrangement of their establishments, modified, of course, at intervals, and by circumstances. So, one such establishment found fairly complete is a key to all others of the same rule. But the buildings devoted to the uses of the Canons Regular of the Order of St. Augustine, to which Leicester Abbey belonged, followed no such regular plan.

Shortly after the dissolution, the site of the abbey of Leicester came to Sir William Cavendish, one of the commissioners for visiting and receiving the surrenders of religious houses, and a mansion was built upon the spot out of the ruins of the abbey. This mansion was destroyed by fire and never rebuilt, and the site probably lay waste for some time. It has for a considerable period been occupied by nurserymen, and the surface soil has received great additions. To these circumstances may be ascribed the difficulties in rightly ascribing the different portions of the site—difficulties which the document now brought forward will, it is hoped, contribute much to remove.

In a memoir upon the abbey, read in Leicester, in May, 1854, Mr. James Thompson, the able historian of the town, reported that "even in a century after the date of the dissolution of the abbey, the very site of the church had become conjectural;" and he continued, "It is necessary to be premised that no vestige of the abbey church, cloisters, or domestic offices remains at the present day above the ground." The writer of the memoir then described the result of excavations made upon the spot, which seem to have gone a very small way towards re-

moving the existing state of uncertainty, and a conjectural appropriation of the locality is then given in this last attempt to elucidate it.

The application of the following document will doubtless be a labour of love to the inhabitants of the county of Leicester, and not without interest to a much wider circle. It is a complete survey of the "Situation, as it is called, of the late Monastery of Leicester." It comes from that portion of our Public Records which is so rich in documents illustrative of our local and general history, and the marvel is how it has so long escaped attention. It is without a date, but it reports the church and the domestic buildings as in "good repayr," and was most probably made very soon after the surrender of the house.

"The View of the Scytuation of the late Monasterye of Leycester.

"The Seyet conteynyth xv akers & inclosyd all about with a wall of stone, parte bryke, standyng halfe a myelle from Leycester towardys the North all invieorned one the south parte with a freysche water ryver curraunt by the same wherein ys ffysche of all kyndes with medowes and large opyn comen felde of arrable land yerly sawen with corne, and of the north with good battyll & fruytfull pastures & wodes there with the parke wherin ys deer parcell of the demeasnes within xl perches of the seyete, parte hygh & champyon ground vere comodyouse & parkely nygh adjoynyng to the grett woodes & pastures called the Fryth & Beemond Leecs, the new parke, the forrest of Leycester & two other parkys pertenynge to the Duche.

"The Churche, the mansyon houses & other buyldynges standyth in the myddyst of the seyete. And a halt way east out of the north parte thereof inclosyd with hyghe walles of stone & mbattelyd leydyng into the seyde seyete, and to a basse court of barnys stabbeys & other housses of husbondrye, & to a small gate house with one turret opeynyng into an other bascourt & with a squayr lodgyng of ayther syde the gatehouse wherein be v chaumbers with chymneys & large wyndowes glasyd, the walles of stone and coveryd with leyde & foure turrettes of stone at the foure cornerres of the same. In the southe-est parte of the seyde court standyth the backhouse brewhouse & ij stables, all of stone & coveryd with tyell. On the west parte standyth the Church conteynyng in leynght cxi fote & in bredyth xxx fote with a large crose yell in the myddyst of the same conteynyng in leynght c fote & xxx fote in bredyth & nygh to the hyght of Westmynster churche, with a hyghe squayr tower stepyll standyng at the west ende of the same wherein ys a great dorre & a large wyndowe glasyd openyng at the entre into the seyde seyete, and a great square house leydyng from the west ende of the seyde churche to the west end of the Frater, wherein be iii great chaumberes with chymneys & large wyndowes parte glasyd, with stayres of tymber leydyng uppe to the same, the walles parte stone & coveryd with leyde, which wolde be much more comodyouse yf yt werr performed after an uniforme all with stone to the prospecte and view of the same. The Frater ys a great large house and well proporeyoned, with a large wyndowe glasyd opeynyng in to the court, the dorter standyng at the est end thereof of lyke proporeyon, with stayres leydyng on hygh to the same & valted under & belowe, wherein be gret large selleres. The Churche, with they foresayd housses, Chapter house & librarye, be all of stone &

coveryd with leyd, & buyldyd squayr about the Cloyster yerde, & a entree leydyng furth of the Cloyster in to the hall & chaumberes & other houses of offyce buylded squayr about a yarde adjoyning to the seyde cloyster, parte stone & parte tymber, parte coveryd with leyd & parte with tyell, with gallerees leydyng above & belawe to the same hall, chaumberes, keychyn, and other housses of offyce. And at the entree out of the basecourt to the same standyth a tower the forefront all bryke with a turret well proporeyoned callyd the Kynges lodgyng, wherein ys two fayr chaumberes with wyndowes glasyd, with chymneys & two inner chaumberes with chymneys, and belawe a parler with two inner chaumberes of lyke proporeyon, and a gallere leydyng from the seyde tower belawe to iij chaumberes with chymneys & to the hall, all of stone and coveryd with tyell, and to serten chaumberes above and belawe for offyceers, and a hyghe galere above leydyng from the forescyd tower at the gate to iiij chaumberes above with chymneys, and to the gret dynyng chaumber standyth¹ on hyghe at the upper end of the Hall well sealyd above with the out caste of large bey wyndowes, and within the same one fayre lodgyng chaumber with an inner chaumber with chymneys and wyndowes glaysed the walles stone & coveryd with leyd. And ane lawe galere leydyn from the Halle to the kechyn and housses of offyce & to vij chaubmers for offyceers, and an entree leydyng owt of the same to the ferinore housses, whereof parte ys newly and lately buyldyd wherin be vij chaumberes with chymneys.

"And there be in the utter court dyvers chaumberes for servauntes in severall playes, and all the forescyd houses with the church be in good repayr

"There ys within the Seyet a pond yerd wherein ys x pondys, parte large and gret with a fayr orchard."

¹ *Sic*, for standing.

Proceedings at Meetings of the Royal Archaeological Institute.

May 6, 1870.

Lord TALBOT DE MALAHIDE, the President, in the Chair.

THE recent decease of Mr. Blaauw, of Beechland, Sussex, was feelingly mentioned by the CHAIRMAN, by Mr. MORGAN, M.P., and by Dr. ROCK; and his early and very valuable support to the Institute was gratefully acknowledged. Mr. Blaauw had been a hearty friend of the Institute since the Winchester meeting, in 1846; he was a constant attendant at the London and annual meetings; and was a frequent exhibitor. A vote of sincere condolence with Mrs. Blaauw was unanimously passed.

Mr. MORGAN, coinciding in all that had been said with regard to Mr. Blaauw, also spoke, with great regret, of the decease of Sir Edmund Antrobus, Bart., an excellent friend of the Institute, and the owner of the site of Stonehenge, of which grand national monument he had taken the greatest care. Mr. Morgan mentioned that since the last monthly meeting, further contributions had been received upon the very interesting subject which had been the chief object of discussion on that occasion, the Roman Sarcophagus lately found at Westminster. Dr. McCaul, of Toronto, had contributed a valuable essay upon the subject, and the Rev. J. G. Joyce, of Strathfieldsaye, whose attention had very long been given to antiquities of the Roman period, was preparing a memoir upon the Christian emblem on the lid of the area. The subject of the proposed removal of the Rood Screen in Exeter Cathedral had also been brought before the Council, and a protest had been made against the proposed alteration. As the Honorary Secretary of the Institute, who resided near Exeter, was then present, he might be able to give some further information upon the subject.

Mr. TUCKER said he most cordially approved of what the Council had done in this matter. The screen was a fine piece of fourteenth century work, probably of the time of Bishop Grandison. It was in a remarkably perfect state, and was one of very few existing examples of the ancient *Jube*, which are now rare. He regretted much that a local Architectural Society should have recommended the removal of the screen simply for the purpose of throwing the choir and chancel into one, and making the fine Cathedral like an ordinary parish church. He contended there was ample space in the choir, as at present arranged, for all ordinary services. The Chapter were acting with great liberality, and were about to make some great improvements in the choir, in which they would be guided by Mr. Scott, the architect, who was totally opposed to the re-

moval of the screen. He congratulated the Institute on the action they had taken in the affair, which had been warmly applauded by all true conservators of Exeter Cathedral.

The SECRETARY read a Memoir, by the late Rev. J. L. Petit, on Cartmel Church. (Printed in this volume, p. 81.)

The Hon. W. O. STANLEY presented some further particulars, furnished by the Rev. W. Willimott, respecting the Roman coins found in the vessel lately discovered at St. Michael Caerhays, Cornwall, and brought to the notice of the Institute in February last.

"In the extreme western parts of Cornwall many discoveries have occurred, from time to time, of Roman coins and other vestiges of the Roman period; of these several remarkable notices have been recorded by Borlase in his Ancient History of the County; some finds of more recent date have been brought before the Institute by Mr. Rogers, of Penrose. At the monthly meeting of the Society in February last some account was given, by Mr. Stanley, of a discovery, in November last year, in the parish of St. Michael Caerhays; and the Society is indebted to his kindness on the present occasion, for a detailed list of the coins that have been obtained from the hoard there brought to light, and catalogued by the Rev. William Willimott, rector of the parish.



Tin vessel found at Caerhays.

"Besides the information thus brought before the Institute by Mr. Stanley, some more precise particulars have been sent subsequently by Mr. Rogers and by his brother, the vicar of Gwennap, near Redruth, which may prove interesting to the members of our Society. A more detailed notice of the discovery and description of the coins will doubtless be published in the Journal of the Royal Institution of Cornwall, of which our friends, Mr. Smirke and Mr. Rogers, have been successively the Presidents.

"The parish of St. Michael Caerhays is situated on the sea-coast, about 8 miles eastward from Truro, and 3 miles from Tregony. It is about 7 miles to the east of the estuary and deep inlets of the sea forming the harbour of Falmouth—the *Cruinis Ostium*, possibly, of Ptolemy,—which may probably, from an early period, have been much resorted to by those adventurous traders, and also by the Romans, as a secure refuge on that perilous shore.

"In November last two labourers were employed in digging a drain in a piece of moor land below a spot known as the "Beech tree Wood," and, having trenched through the peaty surface to the depth of 3 feet, they brought to light the vessel of metal, of which a drawing was shown by Mr. Stanley at the February meeting. It lay in the black stratum just above the clay underlying the vegetable mould. It is supposed that at one period the sea may have flowed over the spot in question, but no second was noticed where the vessel and coins lay: the place is now

about a mile from the sea, and not far from a pool, on the property of Mr. J. M. Williams, still sometimes flooded by a high tide with on-shore wind. There was about a foot in depth of clay under the vessel, possibly deposited by a streamlet that flows over the spot. No remains of any building, wall, or the like, it may deserve notice, appeared near the deposit. There is no cause leading to the supposition that the coins and the tin vessel may have been there buried for concealment; it has been conjectured that the vessel might have been dropped overboard from a boat in landing on the shore, possibly during a repulse by the native Danmonii, who occupied, as it has been supposed, those parts of the extreme West.

"At the time of the discovery, as stated when it was first brought under the notice of the Institute, the vessel was supposed to be of lead; but the metal has subsequently been analysed at the smelting works of Messrs. Williams, at Swansea, and it proves to be of almost pure tin, namely, 97 per cent. of that metal, with three parts only of lead. In form it has been described as resembling a claret jug, with a short neck; it might, however, be more truly compared with a certain copper vessel, having a narrow neck and one handle, that is constantly to be seen in use in the metropolis at spirit vaults, gin palaces, and the like. In the object found at St. Michael Caerhays the upper part of the neck, the mouth, and also the handle had perished; the aperture at the neck had been closed by a plug of wood, which had decayed. The vessel in its present state weighs 3 lbs. 13 oz. When brought to Mr. Williams, the vessel, which may be described as a *capis*, was about two-thirds full, the contents consisting of 1600 third brass Roman coins, with a little mould intermixed; there is some suspicion that with these coins of the baser metal there may have been some of silver, or even of more precious description. *Aurei* are, however, of comparatively rare occurrence, more especially in the large hoards of Roman coins of the later periods that have repeatedly occurred, and in a few instances in western Cornwall. The finders, in the present case, were not the regular workmen employed by Mr. Williams; one of them did not bear a good character; he took the vessel and its contents to his cottage, and kept it for two or three days before giving it up to Mr. Williams, on whose manor the discovery occurred; and the report that his wife had made some allusion to the find of gold among the coins may be little deserving of consideration. On such occasions there is usually a desire amongst the less fortunate neighbours to magnify the importance and intrinsic value of the hoard.

"The coins that composed this curious hoard are wholly of the later half of the third century, and of the Emperors commonly designated the Thirty Tyrants. It rarely occurs that the precise period of any deposit can be ascertained with so strong a degree of probability as in the present instance. The date of the loss or the concealment of the hoard found, as has been stated, in the tin *capis* at St. Michael Caerhays, seems fixed within narrow limits by the dates of the several reigns, as proved by the coins. It cannot have been earlier, as shown by the list brought before us by Mr. Stanley, than A.D. 276, the time of the accession of Florianus, of whose coins two occur in the hoard, nor, probably, much later than the year 282, if so late, as indicated by the coins of Probus, twenty-five in number; these last, moreover, are in very fine condition, and appear to have been a very short time in circulation. It may be remembered

as a fact of some collateral interest that troops were sent to Britain by Probus.

“Our knowledge of Roman occupation in Cornwall is very incomplete ; of Roman roads and stations very little has been ascertained, but it is remarkable that the discoveries of Roman coins in unusually large deposits have been frequent, from the time of Leland, who records the discovery of a brass pot full of Roman money at Treryn, down to our own times. Many finds have been recorded by Borlase, by Drew also, and by Lysons, in their histories of Cornwall. In draining the marsh near Marazion were found 1,000 coins in an earthen vessel, their dates being from A.D. 260 to 350. In 1825 some thousands of small brass Roman money of the Thirty Tyrants were found in a vessel of pure copper. These, like the hoard at St. Michael Caerhays, were mostly of the time of Gallienus, about A.D. 260. The last-mentioned remarkable hoard, as stated by Mr. Carne in the memoirs of the Geological Society of Cornwall, was brought to light in removing part of the cliff to construct a causeway across the estuary of Hayle, the prolongation of St. Ives Bay, and about two miles from an entrenched work, probably of the Roman period.

“As regards the vessel of tin that formed the depository in the recent discovery on Mr. Williams’ estate, it may be observed that, although objects of this particular fashion, which in no degree partake of the graceful character or the elegant outline of the domestic appliances and other utensils of classical antiquity, are rare, similar examples of the *capis* have occurred. Count de Caylus has figured one of bronze, in dimensions almost identical with that obtained lately in Cornwall ; the neck was perfect, it had one long curved handle, and had been fitted with a small lid, attached by a hinge.¹ It is not stated where this vessel was found ; probably on the Continent. In the museum at Tours there is another example of this peculiar Roman vessel, of bronze, from which the fashion of the neck and the handle may be distinctly ascertained. It is probable that these appliances of domestic use were for heated liquids, as the mouth seems to have been closed by a hinged cover, as in various vessels of our own times. The specimen at Tours has been figured by M. de Caumont in his *Bulletin Monumental*, vol. 21, 1858, p. 56.

“In addition, however, to these continental examples of the *capis*, probably Gallo-Roman and of bronze, a discovery of a similar vessel claims special notice, having occurred in western Cornwall, at no great distance from the site where the vessel of tin, brought under the attention of the Institute by Mr. Stanley, was lately brought to light. In form the two were doubtless precisely similar, and the specimen, formed likewise of tin, has preserved the handle and the neck that are unfortunately wanting in that recently obtained. It does not appear that the interest of the older discovery, which occurred in 1756, in the parish of St. Erth, in a Roman entrenchment at Bessens, near the southern extremity of the bay and estuary of St. Ives, has been recognized by our Cornish friends who have taken interest in the deposit lately found, and to whom we are under obligation for the foregoing particulars. This remarkable relic, accompanied by numerous Roman antiquities, now preserved in the Ashmolean Museum, does not appear to have been hitherto noticed as of special interest for comparison with the imperfect *capis* found last year at

¹ *Recueil d'Antiqu.*, tom. v. pl. 85, p. 273. The height is stated to be 9 pouces, greatest diam. 6 pouces 5 lignes.

St. Michael Caerhays. By examination of a sketch of the perfect vessel at Oxford, for which we are indebted to the constant kindness of Professor Westwood, and also by the small engraving given by Borlase, who personally inspected the scene of the discovery at Bossens in 1758, there seems no cause of doubt that the vessel, designated by him a *simpulum* or *profericulum*, was in fact identical in form with that lately brought before us. The relics obtained at Bossens have been briefly noticed by several writers; they lay in a small shaft within the camp that has been described by Mr. Edmonds, in his volume on the Antiquities of the Land's End District, as the only decidedly Roman camp in that part of Cornwall. The objects in question consisted of the jug of tin, weighing 7 lbs. 9½ oz., and containing rather more than 9 pints; a basin of the same metal, described by Borlase as a *patera*, and of particular interest as bearing on its bottom the inscription read as follows: *Livius modestus Driuli filius Deo Marti*—this votive dedication to Mars is now, as stated by Professor Westwood, illegible; also a second *patera*, with two handles; a small mill-stone; and two stone weights, of which the weight is about 15 lbs. and 4 lbs. respectively. These, with the metal vessels, are now, as before observed, in the Ashmolean Museum at Oxford. The shaft in which these relics lay at various depths measured only 30 inches in diameter. The excavation was carried to the depth of 36 feet, terminating in a concave or dished bottom: in each side of the shaft there were holes at certain distances to receive the human foot, so that persons might descend and ascend. This simple contrivance has been noticed elsewhere in certain remarkable shafts to which attention has recently been addressed, as being connected with vestiges of early races in Great Britain; this means of ready descent into the shaft, aided possibly by pieces of wood inserted into the holes, has been noticed by Canon Greenwell in his late researches in Norfolk, that have so conclusively solved the enigma of the curious cavities near Thetford, known as the Grimes Graves.

"The occurrence of the large find of coins made known to the Society by Mr. Stanley, and catalogued by Mr. Willimott, cannot fail to be regarded with interest, as presenting evidence, amongst many similar discoveries in the extreme west, of considerable intercourse, and probably of active commercial enterprise, towards the later part of the third century, and the reign of Gallienus. It will remain for our friends in Cornwall, and for the members of the Royal Institution there, to take into consideration the special causes that may have influenced the extension of Roman traffic or industry in the great source of mineral wealth in Britain, during the period when the remote parts of the empire were constantly convulsed by a series of military revolutions, and the rapid succession of feeble despots."

The following is a list of the Emperors in whose reigns the coins were struck:—

Valerianus.—Two coins; reverses: "Restitutor orbis" and "Felicitas."

Gallienus.—One hundred and forty-five coins. Among the reverses are "Abundantia," "Fortuna," "Pax," "Jovi con. Aug.," "Dia æ con. Aug.," &c.

Salonina.—Thirteen coins; reverse: "Pietus Aug. g."

Posthumus.—Thirty-one coins; reverses: "Oriens," "Pax," and "Salus Aug."

Laelianus.—One coin ; reverse : " Victoria."

Victorinus.—Three hundred and thirty-four coins. Among the reverses are " Invictus," " Pax," " Fides militum," &c.

Marius.—Four coins ; reverses : " Saec. felicitas," " Virtus Aug."

Tetrienus, the elder.—Five hundred and fifteen coins. Among the reverses are " Laetitia," " Hilaritas," " Salus."

Tetricus, the younger.—Two hundred and forty-one coins. Among the reverses are " Spes," " Pietas Augustor." (an urn).

Aurelianus.—Five coins.

Claudius.—One hundred and fifty-seven coins. Among the reverses are " Mars ultor," "—ovi victori," "—securatio" for "consecratio."

Quintillius.—Eighteen coins ; reverses : " Concordia," " Marti paci—"

Tacitus.—Six coins.

Probus.—Twenty-five coins. Among the reverses are " fides militum," " adventus Aug.," " Mars victor."

Florianus.—Two coins ; reverses : " Equitas Aug.," " Providentia Aug."

Antiquities and Works of Art Exhibited.

By the Rev. W. DYKE.—One handle of an amphora of large dimensions, $5\frac{1}{2}$ in. round, found at Cirencester, bearing an impressed stamp **BELSIL**. Owing to the curve in the handle, the stamp, which was impressed on the outer face, was twisted in being applied, and the letters are therefore wider at one end than the other, and the moulded edge sprawled. There is a handle of an amphora in the museum at Cirencester bearing the stamp | **C.ΛZ.** |. The handle exhibited will be presented by Mr. Dyke to the same museum.

This fragment was found in the workhouse garden, at Cirencester, where the stamped handle, now in the museum there, was disinterred with much broken Roman ware. The name of Belsus had not previously been noticed on *amphora*, or vessels of large dimension. Mr. Roach Smith suggests that possibly the name found at *Corinium* may have been Belsillus. It may be compared with **BELSO. ARVE F.** (*fecit*) on Samian found at York. Mr. Smith cites also **BELSA. M.** from Tours, and **BELSVS. F.** from Augst.

By Mr. F. MARYON WILSON.—Specimens of objects of bronze, &c.,



Bronze spur—clamped on leg.


which have for many years been found on the estate of Canfield, near Dunmow, Essex. The objects now shown comprised two spurs ; one of

which, of bronze, and of the mediæval period, is of peculiar and interesting type, and is here figured. The other is an iron prick-spur, apparently of the Roman period. The remaining objects are two fibulæ, a hair pin, and an ornamented fragment, all Roman, and of bronze. The site is named "Fitz Johns," from some early occupier, and is about four miles from Dunmow, and close to the Roman road which led from Colchester to that place. (See *Observations on two Roman stations in Essex. Archaeologia*, vol. v. p. 137.)

By the Hon. WILBRAHAM EGERTON, M.P.—Two plates of silver gilt, each of them decorated with a *replica* of the medal struck in commemoration of the marriage of Louis XII., king of France, in 1498, with Anne of Brittany, relict of Charles VIII. The plates, recently brought, as stated, from Spain, are in fine preservation; they measure, in diameter, 8 inches; the central portion of each is sunk about half an inch; around the medal on one of the plates is the following inscription, in raised letters:—LUGDUN . RE . PUBLICA . GAUDETE . BIS . ANNA . REGNANTE . BENIGNE . SIC . FUI . CONFLATA . 1499. The contraction over the first E in *Gaude(n)te* does not appear; in the specimen of this medal in the South Kensington Museum the mark of contraction is on the outer rim of the medal. The legend around the medal on the other plate is as follows:—FELICE . LUDOVICO . REGNATE. (the contraction omitted) DUODECIMO . CESARE . ALTERO . GAVDET . OMNIS . NACIO. A border, 1 inch in width, of scroll work and griffins' heads in high relief, of early renaissance character, surrounds each of the medals. There are two plate-marks, in a sunk cinquefoil, a female head with a crescent (Diana?), and a monogram of the letters I R or T R (?) combined.—A pair of silver cups, of Augsburg work, with chased decorations. These cups are called, according to "Kuntswerke des Mittelalter und der Renaissance," by Becker and Hefner, "Doecke or Döcklein" Doll. They consist of a male and female figure, terminating in a bell-shaped cup below the waist, and both support a smaller cup over the head. In the above work, vol. i. p. 43, plate 32, there is a description of one almost identical with the female figure cup in Mr. Egerton's possession, as follows:—"In order to fill it the lower cup was turned over, and the upper cup was then reversed. The men emptied the larger one first, and the women drank the smaller one after. The style of ornament and dress fix the date from 1590 to 1610." The cups are richly engraved with scrolls, fruit, and flowers, being introduced on a punched diapered ground. There are two silver marks, the Augsburg pine-apple and the maker's monogram, consisting of an anchor and a large B joined together.

By Mr. H. F. HOLT.—An ivory tankard, mounted on sock of ornamented chased silver in high relief, parcel gilt, the work of the artist, Balthazar Permoser, born at Munich, 1650; died at Dresden, 1732. *Subject*—The battle fought, in 1180, between Otto the Great of Wittelsbach (the founder of the Bavarian dynasty) and Henry, the fifth Duke of Saxony and Bavaria, surnamed "The Lion," who married Maud, daughter of Henry II. of England. At the base is the following inscription:—"Otto M. Com : P. Witelsp. Boioria, Dux, Henricum Leonem . Ped . vellionis . reum principum Sententia ex Auctoratum Ducatu Armis Pellitan mclxxx." The lid is surmounted by a trumpeter on horseback, and the handle represents the armorial bearings of Bavaria. This tankard was carved by Permoser for the municipality of the city of

Munich, by whom it was presented to Maximilian Emmanuel, the elector of Bavaria, on his return to his capital after his victories over the Turks in 1702, and is esteemed one of the greatest works of the artist, and believed to be the only specimen of his carving in England. In 1820 it formed one of the principal attractions of the well-known collection of the late Mr. Heinlein of Nuremberg, from which it was obtained.

By Mr. C. GOLDING.—Impressions of two brass seals found in the Abbey grounds at Bury St. Edmunds. One of them is of pointed oval form; dimensions, $1\frac{1}{2}$ inch, by slightly over 1 inch. The device is a wyvern, with wings closed, tail bifid; the legend— s'. PETRI. DE PHILIPPI: date xiv. cent.—The other is of circular form; diameter, rather more than an inch; the device is an esentecheon, of the fashion prevalent at the period in Germany, the corner on the dexter side cut out, somewhat like a *bouche*, and charged with a merchant's mark, a cross moline springing from a semicircle as a base; the legend—S: clas. tnitz. bozger: zo: collen. The workmanship is good, and in sharp relief; the black letter minuscules carefully cut; cinquefoils, small crosslets, &c., being introduced between the words. The seal doubtless belonged to a cooper (Böttcher) at Cologne, towards the later part of the fifteenth century.

By Sir CHARLES DOUGLAS, through the Very Rev. Dr. ROCK.—An ornamented spoon of silver, probably used for ritual purposes, lately acquired in Ireland. It has two mint marks; that of Holland, a rampant lion crowned; the other being the arms of Amsterdam, three crosses in pale, crowned, on an oblong shield. There is also the letter Q as a year mark, but nothing is known about it. In the bowl is engraved a representation of Our Lord calling forth Lazarus; Mary with a nimbus, Martha without. There is also an inscription: "No one in this life is free from the fear of death," and letters referring to anthems at the administration of extreme unction. The spoon was probably made about A.D. 1640. At that period many Irish priests were educated in Belgium, and one of the class had perhaps this specimen made to order, and had presented it to his superior in Ireland. The handle is in the form of a wolf dog.

By Mr. G. GEOGHEGAN.—Flint and bronze arrow-heads, bronze axe, spear-heads and implements found in Ireland. About twenty specimens of somewhat familiar examples.

The council have a mournful satisfaction in appending the acknowledgment by Mrs. Blaauw of the vote of condolence for the loss of one of the earliest and most active friends of the Institute:—

"BUCKLAND, May 12, 1870.

"DEAR SIR,—I request that you will be so good as to accept my thanks, and to give to the President and Members of the Royal Archaeological Institute my most grateful and heartfelt thanks for their kind condolence to me upon the death of my beloved husband; and also for their very kind expressions of regard towards him. His connexion with that Society had ever been the source of great pleasure to him, and the active part which he ever took in it until attacked by

illness in 1864, had indeed ever been to him a labour of love, especially in working with those whose friendship he so much valued.

"Believe me to be, dear Sir,

"Most gratefully yours,

"MARGT. EMILY BLAAUW."

J. BURTT, Esq.,

Hon. Sec., Royal Archaeological Institute.

June 3, 1870.

The Very Rev. the DEAN OF WESTMINSTER, D.D., F.S.A., in the Chair.

The Rev. J. G. Joyce gave an account of his examination of "Evidences of Roman monuments and records," in relation to the sarcophagus lately discovered at Westminster. His discourse was illustrated by numerous drawings and sketches, copies of inscriptions, original Roman coins, and rubbings from the Westminster sarcophagus.

In an elaborate argument of some length, Mr. Joyce contended that the forms of the letters, the names of the persons, and the words used in the inscription, were of the fourth or fifth century of our era; that the so-called floriated foot of the cross was an extension of it into the form of an anchor, a well-known Christian symbol of that time, and that both tomb and lid were of one period. We hope to be able to give this very interesting essay in a future number of the *Journal*.

The Chairman thought Mr. Joyce had removed any doubts as to the date of the inscription formed upon the peculiar forms of certain letters, and his observations generally were full of deep interest and demanded careful consideration.

Mr. Oldfield said he was much struck with the ingenious and learned discourse of Mr. Joyce, but he could not say that he was prepared to give his entire assent to the conclusions at which he had arrived. He was present at the first finding of the sarcophagus, and he still thought, as he thought then, that the lid and the tomb were not of the same period. It was not so much a question of forms of letters but rather of style and general beauty of execution. Certainly the argument adduced by Mr. Joyce pointed to a later date than had been hitherto given to the monument. The idea of the combination of the cross and anchor was very ingenious and interesting, but he must still reserve his judgment on that point. All, however, seemed to be agreed that the tomb had been brought from some other spot, and that it was certainly not an instance of a Roman burial at Westminster.

Professor Westmacott begged leave to withdraw his remarks upon the probable date of the cross on the lid under the correction afforded by the rubbing exhibited by Mr. Joyce, which had no characteristics of the mediæval period about it.

A vote of cordial thanks to Mr. Joyce for his valuable address was passed with acclamation, and the hope was strongly expressed that his memoir would be printed in the *Journal*.

Antiquities and Works of Art Exhibited.

By the Rev. GREVILLE J. CHESTER.—Porcelain cylinder of Babylonian or Assyrian work. Cylinders of this material are of very rare occurrence.

This specimen was found in Egypt with another of the same description now in the British Museum.—Marble head of a statue of a Roman emperor. It was found in digging the foundations of a caffè at Nola, near Naples, and was used as the ornament of a small grotto in the garden of the caffè. The grotto itself deserved notice as a singularly faithful reproduction of the ancient Pompeian shellwork. The head, which is considered by Mr. C. Newton, to be that of the emperor Caligula, has been presented by Mr. Chester to the British Museum.—Small slab of white marble procured at Cairo, and bearing the representation of a crowned figure with a semi-Phœnician or Cypriote inscription, interpreted by Professor Ebers, of Jena, to be dedicated by a physician in honor of Isis and Osiris the guardians of Cyprus.—Illuminated roll of the book of Esther, on vellum.—MS. poem of the fifteenth century in honor of Christoforo Moro, Doge of Venice.—Perfume vase used at weddings in the Coptic church; from an ancient convent at Old Cairo.—Romano-Egyptian ear-rings, found at Alexandria.—Object in blue glass resembling a horse's tooth, found amidst ancient Arabic glass and pottery on the mounds of Old Cairo (Fostet). A similar object, but of smaller size, is preserved in the Egyptian collection at Turin; it is probably Arabic.—Small dagger or arrow-head, bought at Rome.—Four Roman fibulæ found at Bologna.—Bird's head, with silver eye, found near Florence.—Greek knife with ivory handle, found at Smyrna.—Greco-Egyptian ear-rings, found at Alexandria.—Cup of copper, gilt, bought of a drug merchant in Cairo.

By Mr. S. S. LEWIS.—Drawing of a bronze dagger of unusual type, found in the fen land at Welney, Norfolk. It is $6\frac{3}{4}$ in. long, by $1\frac{1}{2}$ in. in the broadest part, and has a flat blade, instead of the ordinary angular grooved edge. It was found near the spot where the large Roman *lanx* of pewter lay which was exhibited at the December meeting.

By the Rev. J. BECK.—Two stone hammers found at Burgs, Island of Gotland.—A copper thurible from Elingheims Church, Island of Gotland.

By Mr. ALEXANDER NESBITT.—A tiger's head and neck modeled in black terra-cotta 2 in. long, purchased at Rome. The material is the same as that of the black vases found at Chiusi. Three or four like objects are preserved in the Etruscan museum in the Vatican, and are believed to have served as handles for daggers or knives, being furnished with sockets into which the end of such an instrument might have been fitted. The material is extremely hard, so that it can with difficulty be scraped with a knife.—A set of personal ornaments said to have been found at Acoli, purchased at Rome. They consist of a fibula 6 in. long, an oval buckle $2\frac{1}{2}$ in. by 2 in., and one half of a clasp measuring $2\frac{3}{4}$ in. by $2\frac{1}{4}$ in. All three are of silver, some parts ornamented with patterns rudely executed in niello, the rest with cord and other patterns in raised lines, these are thickly plated with gold. The fibula and the clasp are moreover decorated with small garnets cut in cabochon. The pin of the fibula appears to have been of iron but is broken away. The upper part of the fibula is semicircular, from the circumference of which five projections of the length of about half an inch extend, below the semicircle is a bow, below this a lozenge with a prolongation of about an inch. The ends of the buckle are formed into rude representations of serpents' heads. Many examples of ornaments of like character have been found in Italy and



Height 5 in.



Height 2 in. Diameter at the top 4 1/2 in.

ROMAN BRITISH POTTERY found in the Isle of Portland.

in Germany, one fine example found in the former country is in the British Museum, and fibulæ of a nearly similar form are often met with in early Saxon graves in this country. Such ornaments seem to have been used by the Germanic races in the earlier centuries of our era.—A fibula 3 in. long, also of silver partially plated with gold, of the same type as the fibula mentioned above, but instead of a lozenge in the lower part is an oval, and below this a representation of a head with a gaping mouth of so rude and conventional a character that it is difficult to say whether it is intended to represent the head of a man or of an animal. The *acus* of this fibula remains and is of silver. Also bought at Rome.—A penannular fibula of nearly circular form 1 in. long, the ends are rude representations of heads of animals. It is of silver and has been wholly or partially plated with gold. Bought at Rome.²—Matrix of a seal of silver $1\frac{3}{4}$ in. in diameter, the inscription in a fine Lombardic letter is, "Secretum civium in Delez." Within this is an escutcheon on which is the bearing, paly of five, on this is placed diagonally another escutcheon on which is a lion rampant guardant. On the spaces between the inscription and the escutcheon, are bands of foliage which seem intended to represent the hop plant. The date of the seal would appear to be about A.D. 1300—1310.

By Mr. J. E. NIGHTINGALE.—Nineteen photographs of vestments given to the church of Anagni by Innocent III. elected 1193, and Boniface VIII., 1294. These represented some fine specimens of embroidered work and some rich fabrics, but it was remarked by Dr. Rock that they were not equal to the examples existing in this country. There was in fact no specimen of the "Opus Anglicum" at Rome, and nothing like the well-known "Sion cope."

By Mr. W. H. HOLLAND.—Two vessels of ancient pottery. They were found in the year 1868, in the Island of Portland, in a grave formed of unhewn flag-stones above 5 ft. below the present surface. They are of the Roman-British type,—the larger vessel of brick red ware, the smaller almost black. (See woodcuts.)

By Mr. BURTT.—A clasp knife, probably of the early part of the sixteenth century. It is said to have been found in removing the foundations of Old London Bridge, and was thickly encrusted with mortar. When closed it measures $6\frac{1}{4}$ in. by $1\frac{1}{2}$. The blade is $5\frac{1}{8}$ in. long and is of finely-tempered metal. It bears the name "DeLaunay" and the impress of a small stamp, somewhat of the fleur-de-lys form. The back edge of the blade is waved, and the whole back has been gilt. The wave has been carried down both sides of the handle. The handle is made of two plates of ivory stoutly united by three rivets, and the surface of the handle is cross-hatched with lines so as to form a diamond-shaped pattern, and greatly to aid the grip. There is a catch at the back to fit into a slot in the blade when open which fixes it, and would aid its use as a dagger if necessary. That its use was domestic is shown by the remains of a small corkscrew, which folds down into the handle.

² Fibulæ of cognate types have been found in Cambridgeshire (engraved in Akerman's Remains of Saxon Pagandon, pl. xxxvii.) and in Normandy (see the

Abbé Cochet's Normandie Souveraine, pl. xviii.). A fine example, found in Italy, is engraved in Hore Ferales.

July 1, 1870.

The President, LORD TALBOT DE MALAHIDE, F.S.A., in the chair.

The Chairman introduced His Worship the Mayor of Leicester to the meeting. That gentleman had come to assure the members of the Institute and their friends, that a most cordial welcome awaited all those who would be present at the annual meeting, to be held in that town at the latter part of that month.

R. Stevenson, Esq., Mayor of Leicester, begged leave, on behalf of the Corporation and the inhabitants of the town, to express to the Institute the cordial satisfaction with which their visit would be welcomed. He feared it would be found that many of the evidences of the occupation of Leicester by the Romans, as well as many of its mediæval monuments, had been overlaid by the industrial occupations of the modern town; but very many of its inhabitants held those monuments in high regard, and they hailed the visit of the Institute with welcome, as sure to improve the knowledge of their antiquities, and to stimulate their appreciation. In the name of the townsfolk he bid them heartily welcome to the ancient borough of Leicester.

The Chairman then drew attention to a British gold coin exhibited by him, and which is stated, on what is thought to be credible testimony, to have been found a short time since by a poor cripple at Bellator Tor, near Prince Town, Dartmoor.

Mr. J. H. Parker, F.S.A., gave an account of "Recent Archaeological Researches in Rome," illustrated by numerous plans, drawings, and photographs. This highly-interesting memoir is printed in this volume (p. 165).

Antiquities and Works of Art Exhibited.

By the LORD TALBOT DE MALAHIDE.—A gold coin found near Prince Town, Dartmoor. The obverse is convex, bearing an object like a fern-leaf or ear of corn; reverse, a disjointed horse to the right; above, a crescent and pellet, or small cross; below, a wheel and a small cross; before the horse's head an oval object. This coin is almost identical with that described by Evans (pp. 139—141) of "Coins of the Ancient Britons," and figured in plate I. 4. But the legend "Catti" is better preserved on the coin there figured; on the Dartmoor example a portion only of the last two letters is to be seen, the impression not having been struck straight. There seems a doubt whether this coin refers to a British tribe, like the "Cassii," or "Catechilani," or bears a portion of the name of a chieftain. All the coins of this type which are known, have been found in the west of England, at Chepstow, Frome, and Nunney, in the same vicinity. In the Nunney hoard, two coins of this type were found, associated with the coins of Claudius and Antonia. In the immediate vicinity of Bellator Tor there are some of the "hut circles," so frequent on Dartmoor, and this coin would give some approximation to their date, which can hardly be later than the first century of our era.

By Mr. OCTAVIUS MORGAN, M.P., V.P., F.S.A.—A silver baton, surmounted by a crown, seemingly intended for a constable's staff of office, such as were formerly carried by peace officers. The staff or baton proper is $6\frac{1}{2}$ English inches in length, and the total length, with the crown, is

7 $\frac{3}{4}$ inches. The staff is cylindrical, and $\frac{3}{4}$ of an inch in diameter ; it is French work, being graduated with six French inches, and bears the inscription, very neatly engraved,—“Six Pouces du Pied de Roi ; Monillez à Paris, 1767.” It opens in three places ; the lower division unscrews at one inch from the bottom, and has evidently been used for ink ; the middle portion opens by sliding without a screw, and forms a pen-case 4 inches deep ; whilst the cap at the top again unscrews, showing a cavity $\frac{1}{2}$ an inch deep. This cap is surmounted by an English crown, which may possibly have been added to make use of the French cylindrical staff, and which may, in the first instance, have been a simple round ruler and graduated measure containing writing implements, after the manner of an ink-horn. There is a steel blade, 3 inches long, with a gilt sheath, which screws into the summit of the crown, thus forming the baton into a weapon. The blade is now carried in the centre division ; there is no hall mark on it ; it is very neatly made, and very massive and solid.—A diminutive silver mace, of the time of Queen Anne, very probably the staff of office of a constable or peace officer of importance of that time. In its present state it is 5 $\frac{1}{2}$ inches long, and, like all state maces, consists of a large head surmounted by a crown, with a stem or handle. This latter is 3 inches long, and has engraved on it “Wells Ellard,” probably the name of the first possessor. At the bottom of the handle is a circular seal, engraved with a double interlaced cypher composed of the letters H. G. The head of this mace is 1 $\frac{3}{4}$ inches in diameter, and 1 $\frac{1}{2}$ inches deep, and of the usual cupshaped form common to all maces. It is embossed on the exterior with the four royal badges—the rose crowned, the harp crowned, the thistle crowned, and the fleur de lis crowned ; and between each a foliated ornament. It is surmounted by an arched crown of crosses patés and fleurs de lis ; the arches of the crown have, however, been broken away, and only a fragment of one remains. On the flat top, within the crown, are embossed the arms of Queen Anne, viz. 1 and 4 England and France quarterly ; 2 Scotland ; 3 Ireland. In the 4th quarter the arms, however, are France and England quarterly ; above is the crown, on either side of the top of which are the letters A. R. ; the supporters are the lion and unicorn ; beneath, on a scroll, is the motto—“Semper eadem.” The top or head opens by unscrewing the crown, and so forms a small cup or box. It is not an uncommon thing for the heads of large maces to open in this manner, and I believe the cup so formed was used for drinking the sovereign’s health ; but this is hardly large enough to be used for such a purpose, except by the individual owner, being no larger than a small wine-glass, and may therefore only have served for a box. The seal seems to have been intended for wax, and therefore it could hardly have been for wafers for the use of the seal. I have always considered the mace to be the emblem of civil power, and, as such, seems to have always belonged to and been borne by and before persons invested with civil authority. It was probably in its origin a weapon, having been used as a military arm ; but as a civil weapon or ensign of office, seems always to have been borne as an ornament and emblem of royal authority, the royal arms and crown. The earliest civil maces seem always to have had a large globular head, the top of which was encircled by a crown, which was however not arched till after the Restoration, when that form of crown was introduced for the mace head ; and very many of the earlier

maces had arches added to them at that time to put them in the fashion. In very many ancient boroughs there are officers called Serjeants at Mace, who carry the maces before the civic authorities; and even in olden days they were the head of the constables, or the then force for the preservation of the peace, and such maces were then staves of office. The practice was continued down to the present day, for all constables have staves, on which are or used to be painted the royal arms, surmounted by the crown, as the emblem of the authority by which and under which they act; and in my early recollection it was the practice of most regular constables to have in their pockets small staves of wood, about 6 inches long, surmounted by a brass cap topped by a crown. I rather think that Townsend, the old Bow Street officer, always carried a small silver staff in his pocket; and the porter at the cloister-gate at the deanery at Westminster had a small silver staff or baton which he used to take out of his pocket when called upon to exercise his authority in Dean's Yard at Westminster. I am therefore disposed to consider this the pocket mace or official staff of some important peace officer of the time of Queen Anne, whose name may have been Wells Ellard. Of the history of this object nothing is known. It is now the property of Mr. Peter, silversmith, of College Green, Bristol, who has very kindly sent it up to me for inspection, with permission to exhibit it here this day. He has had it in his possession some years; his predecessor obtained it among a collection of silver belonging to the late John Hugh Pigott, Esq., about the year 1855; and Mr. Pigott is believed to have purchased it of a silversmith at Bath.—An old repeating watch, by Paul Dupin of London, of the middle of last century, in case of fish-skin perforated to let out sound. Inside, by the side of the dial, is engraved "Dr. Samuel Johnson," 1767, in the style and letters and figures of the period. The engraving has been done for a great many years, and the letters are oxydised through age and neglect, like the other parts of the metal where the gilding is worn away; it may therefore be very fairly considered to have been the property of Dr. Johnson, and purchased about the time of the date. Dr. Johnson was in needy circumstances till the king gave him a pension in 1762; and in 1766 he became intimate with the Thrale family, and his pecuniary circumstances were considerably improved; it is therefore very probable that he then indulged in the luxury of an expensive repeating watch.—Gold ring, containing, under the bezil, a sundial set with a highly coloured turquoise of the "Old Rock;" seventeenth century.—Two gold triplet rings, called Fede, or betrothal rings.—Episcopal ring, gold, set with small sapphire; thirteenth century.—Gold seal ring, lion rampant; sixteenth century.—Gold ring, engraved with pelican; fifteenth or sixteenth century.—Gold ring, set with double diamond; sixteenth century. Gold mourning ring, 1698, with gold skeleton on hair.—Large ring, with arms and cap of Cardinal Condolmerio, afterwards Eugenius IV.; 1431—1447.—Silver decade ring: decade or rosary ring, formed with ten fish on a larger ring.—Three silver rings, engraved with astrological and cabalistic subjects.—Silver ring, set with a piece of bone, probably a charm or medicinal ring.—Large silver ring, with clasped hands.—Large rope silver ring, with inscription, like "Memento Mori."—Silver ring, with names of the three kings.—Bronze ring, with two seated and crowned figures. (t)—A tea-pot, of ruby glass, mounted in silver, gilt; Augsburg work, early eighteenth century.

By Mr. H. F. HOLT.—A beautifully-chased silver watch, presented by Amalia of Hanover to her husband, Joseph, King of Hungary and of the Romans (afterwards Emperor of Germany) upon his first victory, at Landau, September, 1702.—Also a silver medal, struck in commemoration of the capture of that place. Apart from its historical interest, the case is remarkable as a rare and beautiful specimen of Augsburg work in the early part of the eighteenth century, the watch being made by Augustine Rennele, and the exquisite design and chasing by the celebrated C. Schmidt, both of Augsburg. The “victory,” to celebrate which this watch was presented, was, so far as the King of Hungary was concerned, merely nominal, it having been considered necessary, “in order to animate the warlike spirit of the army,” that a member of the Imperial family should make his appearance in the field. Joseph arrived in full state at the camp before Landau in July, 1702. The Royal *cortège*, however, presented anything but a martial appearance, as it consisted of about 230 persons, more than 100 of whom belonged to the King’s kitchen and cellar. Besides these there were 170 persons, with a separate staff of ten cooks and under-cooks, and of sixteen scullerers in ordinary or extraordinary, who followed in the train of the Queen Amalia. The Royal caravan travelled in seventy-seven coaches or *calèches* by Egen, Baireuth, Bamberg, Ambach, and Heidelberg, where Amalia stopped, whilst her Royal husband went to the camp, then under the command of the Margrave Louis of Baden, under whose generalship the victory of Landau was gained on the 10th of September. The medal was struck by Philip Henry Muller, the able engraver of medals, at Augsburg. On the obverse is the bust of the King, nearly full face, and with long flowing peruke. He is in armour, and wears the order of the Golden Fleecce. The legend is JOSEPHUS D.G. ROM. ET HUNG. REX. Reverse, the siege of town of Landau, with the legend :—ARMORUM PRIMITIE. At the base :—LANDMIRA RECEPTA D. 10 SEP. 1702. On the rim of the medal is the inscription—Leopoldi: nunc te prole tua juvenem Germania sentit, Bellaque pro Magno Cesare Caesar agit. The King of Hungary, thus commemorated, died on the 17th of April, 1711, at Schönbrunn, near Vienna, in his 33rd year.

By Mr. J. G. WALLER.—A drawing of Playing upon Bells, from a sculptured capital in the Cathedral at Autun. An account of this singular sculpture will be given in a later portion of this volume.

By the Rev. E. HILL.—Bronze medal found at Bush End, Hatfield Broad Oak, Essex. It is in commemoration of a miracle performed at Velletri, A.D. 1516. It is inscribed :

Obverse.—(S)anguine ab oculo miraculose effuso. A.D. 1516.
Velitris in eadem eccles.

Reverse.—Ut noxia subnoceas et profuso concedas
Velitris in eccles. m d sanguine.

By the Rev. CANON GREENWELL, through Mr. FLAXMAN C. J. SPURRELL.—Objects found in the “Grimes Graves,” Norfolk. These excavations are situated three miles north-east of Brandon, and one mile north of the river Ouse. They are about 254 in number, and are irregularly distributed, at about 25 feet apart, over a space of 20 to 21 acres. The pits are circular, from 20 to 65 feet in diameter, filled in by the ancient

workers to about 4 feet of the surface, and are in some places confluent. On the surface of the immediate neighbourhood have been found numerous specimens of flint and stone implements and flint flakes, but no polished or ground tool. These excavations appear to have been formed in the first instance for the purpose of obtaining flint fit for the formation of weapons and implements. The pit from which the exhibited objects were taken was 28 feet in diameter at the mouth, and 12 feet at the bottom. It cut through dark yellow sand 13 feet to the chalk, and passing through a layer of flint at 32 feet from the surface, terminated at another layer of excellent quality 7 inches thick at 39 feet from the surface. The ancient workers having removed the flint at the bottom of the shaft, worked lateral galleries, removing the chalk over the layer of flint about 3 feet vertically, and 4 to 7 feet horizontally. They extracted all the flint from the floors of these galleries and from their sides as far as could be done with safety. The instruments chiefly employed were picks and hammers of red deer horn and flint tools. In excavating the pits that had been filled up a large number of these picks and other tools in all stages of use occurred, while fragments of broken ones abounded. In the galleries were found small rude cups of chalk, supposed to have been lamps, as artificial light was necessary in that part of the operations, and one was found on a small ledge where it might have been so used. The filling up of the pits must have been done at considerable intervals and without any regularity. The objects found in clearing them out consist of bones of the *bos longifrons*, goat, horse, pig, red and fallow deer, and domestic dog. The majority of the bones are broken for extracting the marrow; and charcoal, burnt sand, chippings and cores of flint were abundant. Specimens of most of these objects were exhibited. No pottery has been discovered.

By Mr. R. H. SODEN SMITH.—A gold ring found in Sicily, belonging to Signor A. Castellani. Byzantine work:—On the bezil are figures of the Virgin and the announcing Angel in niello, each with a plain nimbus. Round the hoop is the salutation:—

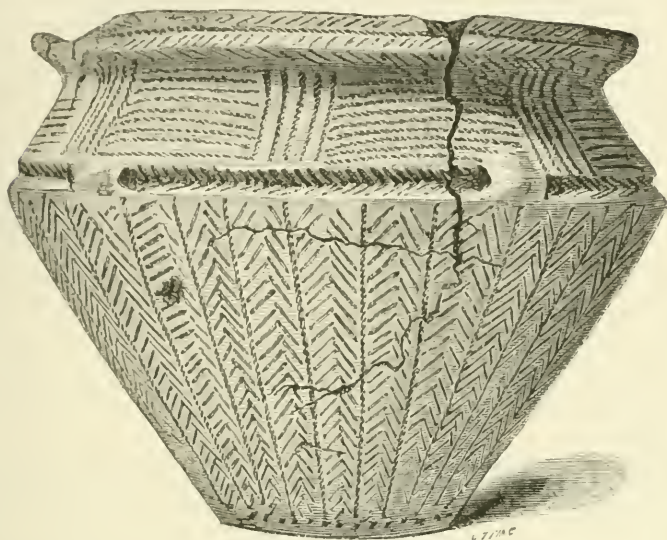
χερε [χαρε] χαριτωμενη ο κε μετα σου
κυριος σου

in uncial letters, centre portion nearly obliterated by much wear; the form of the ring somewhat oriental.

By Mr. T. BLACKMORE—Specimens of fire-arms and military gear lately manufactured at Tetuan, in Africa, in which some types of the sixteenth and seventeenth centuries were closely followed.

By Mr. A. G. GLOGHINAN.—Two sepulchral urns, found at Strabane, co. Tyrone. These specimens of the elaborately ornamented Irish urns are nearly in perfect condition. They are of unglazed baked earth, and most probably hand-formed. They are very similar in ornamentation to the urn figured in the *Journal of the Royal Historical and Archaeological Association of Ireland*, Fourth Series, January 1870, vol. i. p. 29, but without the groove and perforated loops at the greatest circumference. By the kindness of the Association and of the Rev. James Graves we are enabled to place before our readers a representation of that fine example, obtained in the same county as those exhibited. It was found in a cist, with burned bones, in the Townland of Muckrackens,

co. Tyrone, and supplies a very remarkable specimen of the class of "Food-vessels," with a groove and perforated ears, that seem adapted as a means of transport or of suspension.



Urn found in a cist, Mackrackens, co. Tyrone. Height 5 inches, circumference 20 inches.

Archaeological Intelligence.

The arrangements for the Meeting of the Institute at Cardiff next year under the presidency of the Marquis of Bute are in forward progress. From Cardiff some of the most remarkable and interesting antiquities of South Wales can be conveniently reached: the castles of Cardiff, Chepstow, Caldecot, Raglan, Caerphilly, and Morlaix are types of mediæval military architecture; the grand ruins of Tintern, Ewenny, and Neath Abbeys present features of striking interest; while in Caerleon and Caerwent, the *Isca Silurum* and *Venta Silurum* of the Romans, may be seen many remarkable evidences of the importance and high rank of those positions under the sway of that great people. Several excellent and characteristic specimens of ecclesiastical and domestic architecture will also be well within reach of the visitors at the Cardiff meeting. The cathedral of Llandaff, full of points of interest, is about a mile and a half from Cardiff, while the churches of Llantwit, St. Donat's, Chepstow, and Magor, present very noticeable and varied features; and at several of the places named, good specimens of domestic architecture may be seen.

Many of the localities here indicated afford, in the events which have made them famous, excellent materials for memoirs or essays, and

especially the incidents connected with the first Norman occupation of the land of Morgan. These, it is hoped, will not be wanting to add to the interest of the meeting. A temporary museum will be formed, for which objects in any way illustrating the history and antiquities of the district are requested to be contributed. It may be added that public accommodation for the purposes of the meeting has been very liberally promised by the Corporation of Cardiff, and that hotels and other conveniences for visitors are ample and good.

The direction of the excavations in Rome has been given to Signor Rosa, and 300,000 francs and 200 workmen allotted to the work. A general plan has been arranged, and a commencement is to be made with the Forum Romanum, after which the Palatine, the Forum of Augustus, &c. At San Clemente a Mithreum has been discovered at the side of the apse of the Basilica of Constantine. It is probably of the time of Julian. The mosaic roof is in imitation of a cavern. The *altare* is there, the sacred stone (*cos*), an *ara* with the usual mystic bas-relief, a statue of Mithras, the niches for the Genii, the division set apart for the initiated, &c. Near Genzano the remains of the Templum Nemorense of Diana with many inscriptions have been discovered, one of which contains the whole inventory of the objects of the sacristy—a most interesting document.

We understand that the publication of the late Mr. Papworth's "Ordinary of British Armorial," which was suspended by a long and painful illness, is about to be resumed upon different terms under a competent editor, and that the new terms of publication will be such, that even those subscribers who discontinued their subscriptions early, will be able to obtain the remainder of the work at a reasonable price.

A new and compendious History of the County of Sussex is announced for immediate publication by Mr. Mark Antony Lower, F.S.A., whose frequent contributions to the history and archaeology of that important county, especially in connexion with the Sussex Archaeological Society and its periodical congresses, are familiar to all who take interest in English topography. The proposed comprehensive book of reference will form two volumes, ranging in size with the Transactions of the local society, and comprising an index of reference to the first twenty volumes of that valuable series; this feature of the work cannot fail to render it of great utility to the members, and also to all who may have occasion to consult the copious mass of precious materials brought together through the well-sustained efforts of our lamented friend Mr. Blauw and his efficient coadjutors, amongst whom Mr. Lower has for many years taken a very active part. Subscribers are requested to forward their addresses to the author, Pelham Place, Seaford, or to Mr. G. P. Bacon, the publisher, Lewes. The subscription price will be twenty five shillings.

The Rev. E. H. Knowles, Fellow of Queen's College, Oxford, proposes to publish an account of Kenilworth Castle, with about twenty-four photographs and numerous other illustrations. This work will give a description of the interesting results of excavations carried out by direction of the late Earl of Clarendon. The price (to subscribers) will not exceed a guinea and a half.





Fig. 1.—Hondas de las Hadas, Spring of the Fairies; Department of the Basses Pyrénées.

From a drawing by Gen. Sir Vincent Eyre, C.B.

The Archaeological Journal.

DECEMBER, 1870.

MEGALITHIC REMAINS IN THE DEPARTMENT OF THE BASSES PYRENEES, WITH NOTES ON PREHISTORIC ARCHÆOLOGY IN SPAIN.¹

By LORD TALBOT DE MALAHIDE, F.S.A., M.R.I.A., President.

DURING my stay at Pau, in the winter of 1867-8, I made the acquaintance of the Vicomte de Villemarqué, a distinguished antiquary of Brittany, who has given much attention to what they call Celtic antiquities. He informed me that within a short distance there were some remarkable monuments of this period—indeed, the only ones he was aware of south of the province of Poitou. We accordingly arranged for an expedition to visit them, and we were fortunate enough to secure as a companion General Sir Vincent Eyre, to whose ready pencil I am indebted for the accompanying sketches. I regret extremely that owing to circumstances we were not enabled to give as much time to the investigation of these monuments as I could wish. There was a good deal of snow on the ground, and I did not make any measurements, relying upon obtaining this information in detail from another source ; in this expectation I have been disappointed.

After passing the picturesque and woody sub-Pyrenean region, we emerged on the Val d'Ossau, which leads to Eaux Bonnes, and stopped at Bielle. This is the site of a Roman town, and mosaics of that period have been discovered there.

¹ This memoir, of which the greater portion was communicated by the noble author at the annual meeting of the Institute at Lancaster in 1868, is here reproduced, by his kind permission, from

the Proceedings of the Royal Irish Academy, vol. x. p. 472. The Institute is indebted to the liberal courtesy of the Academy for the use of the accompanying illustrations.

However, neglecting them, we left the beaten road, and penetrated into the flanks of the main chain of the Pyrenees. The scenery was very fine, commanding as we did the beautiful Val d'Ossau, and enveloped by an amphitheatre of mountains. Between three or four miles from Bielle, we got into the snow, and found ourselves in a circular valley, with a stream running down, a humble chapel, and a plateau surrounded by a circle of chestnut trees, in the midst of which was the most remarkable of the circles which came under our observation. The spot is called, in the dialect of Beárn, *Hondaas de las Hadas*, or Spring of the Fairies (see Fig. 1). In the month of May I understand that there are great festivities among the peasantry, who dance and amuse themselves under the trees. It is considered a blessed spot, and no evil spirit ventures to disturb their innocent enjoyments. The spring has a still holier character; it is under the protection of the Virgin Mary, and its waters were held to be a sovereign remedy against the rinderpest, when it first invaded the south of Europe, about the middle of the last century. The chapel was then erected, and I believe that the patron saint is considered to have exerted a prophylactic influence during the prevalence of the late *peste bovine*.

But to come to some details of the "druidical" circles. They are very small, the largest not measuring above four or five feet in diameter. There are a very considerable number of them, between thirteen and twenty. Some are perfect, others in a dilapidated state. The stones of which they are formed are evidently of the locality, and none are of large dimensions. They are very rude, and there is no appearance of cutting or dressing. There are also no signs of inscriptions, or designs of any description. We fancied that we could trace one, if not two, large circles enclosing the whole; but it was exceedingly difficult to form any accurate opinion on the subject, owing to the state of the ground, which was covered with snow. I trust that some competent antiquary, with time at his disposal, will give a more detailed and satisfactory description.

Turning to the right, and ascending a hill of slight elevation, we came to a kind of terrace overlooking the winding Gave d'Ossau. There were no trees, but a good deal of gorse, box, and the other usual Pyrenean underwood. Here,



Fig. 2.—Circles of stones, near the Val d'Ossau, Department of the Basses Pyrénées.
From a drawing by Gen. Sir Vincent Eyre, C. B.



Fig. 3.—Cronlech at Buz, near Oloron; Department of the Basses Pyrénées.
From a drawing by Gen. Sir Vincent Eyre, C. B.

after a little investigation, we discovered the object of our search. In a nearly straight line, following the course of the terrace, we found about a dozen similar circles. They were of about the same dimensions, but the stones were rather larger (see fig. 2). These curious remains probably had been less disturbed than the others, owing to the superstitious dread which as we heard prevails in the neighbourhood with respect to them. They are supposed to be haunted by the *loup-garou*, and no peasant would venture to approach them after dark.

These are the only circles which we heard of ; but I have little doubt that, if the sides of this extensive chain of mountains were closely examined, many more would be discovered. The whole of this country doubtless was occupied by the Iberian race, of which the Basques are the remnant ; and yet, strange to say, I have not been able to ascertain that any undoubted monuments of that widespread family have been discovered in the south of France.

On our return, we went through Arudy to Buzy, on the road to Oloron, and near that town visited a very interesting cromlech, or *dolmen*, as they are called in France. It is not a large one, but in a good state of preservation. This is probably owing to its having been originally buried in a mound of stones. The tradition is, that some thirty or forty years ago there was a band of robbers who haunted a neighbouring wood, and they, holding the popular idea that such monuments always contained treasures, took the pains to remove the heap of stones, when the cromlech, and I believe no treasure, appeared. It is not often that archæology is indebted to men of their calling for such valuable discoveries. The accompanying woodcut (fig. 3) gives a perfect idea of the Buzy cromlech.

I proceed to offer some notices of Spanish archæology, and especially of the Prehistoric remains in the Peninsula.

Spain is a country full of interest, and has been very imperfectly explored. Its riches in an Agricultural, Metallurgical, and Geological point of view, are tolerably well known. The great masters of the painting schools of Seville, Badajoz, Granada, and Valencia have a world-wide reputation. Its sacred edifices, especially the cathedrals of Burgos, Toledo, Cordoba, and Seville, have been long studied by the architects of all nations. It is not, however, so well known

that a rich mine of Archæological wealth exists in the Peninsula. It is true that the ruins of the Roman cities which once existed have long attracted observation ; the aqueducts of Alcantara, Segovia, and Tarragona, the amphitheatre of Italica, and the ancient city of Merida, have been the pride of Spaniards. Their museums also contain fine collections of ancient coins, belonging to the Iberian, Carthaginian, Roman, Gothic, and Mussulman periods. There are few local museums ; those of Seville, Granada, and Tarragona are the most remarkable that I have visited. I must also mention that a National Museum of Antiquities is now in course of formation at Madrid. It is under the direction of one of the most distinguished Archæologists of Spain, El Señor Don José Amador de los Rios, and contains a magnificent collection of Roman, Arab, Mediæval, and prehistoric remains. It has also a very large ethnographic collection, as well as a cabinet of ancient Spanish coins, attached to it.

The Academia de Historia has a fine library, and some Mahometan inscriptions, besides a magnificent silver *lana*, called the *Disco Teodosiano*. It was found at Merida, and is in a fine state of preservation. It is ornamented with figures in relief, representing the Emperor Theodosius and his two sons, Arcadius and Honorius, sitting on thrones, with other allegorical figures, and an inscription proving that it had been produced in commemoration of the *Quinquennales* of the elder emperor. I know of nothing like it in any museum in Europe. It will doubtless be ultimately deposited in the National Archæological Museum at Madrid.

I shall not allude further to the Moorish antiquities, which are very remarkable, and have attracted much attention in Spain. This country possesses several accomplished Arabic scholars, among whom El Señor Pascual de Gayangos is *facile princeps*.

To come to the subject which I have principally in view, Prehistoric Archæology, I was agreeably disappointed in finding that although, as I believe, out of Spain little is known of the most ancient monuments contained in it, at the present moment nothing interests the learned in that country so much as the late discoveries in the Swiss Lakes and Caverns of the Dordogne. They are also giving great attention to the study of Celtic remains in Ireland, Brittany,

and other parts of Europe ; and, what is most important, there are many intelligent antiquaries who are busy in researches through the different provinces of their own country, and making excavations, &c. I may mention, among the most distinguished, Senor̄es Don Manuel de Gongora y Martinez, Don Hernandez of Tarragona, Don Jose Villamil, Don Francisco Tubino, and Don Antonio Benavides, the President of the Academia de Historia. Don Manuel de Gongora has lately published a very remarkable work on this subject, from which I shall, before the conclusion of my memoir, make a few extracts. I also feel bound to express my acknowledgments to Don Francisco Tubino, who first indicated to me some of the sites where prehistoric remains were to be found. It is remarkable that, whilst we are accustomed to consider the Spaniards as very backward in most branches of intellectual inquiry, it is the only country that I know of in which a respect for Archæology is endeavoured to be planted in the rising generation by elementary works. I may specially refer to a little volume printed at Barcelona, which I may call an Archæological Primer, by Don Jose de Marjanés, for the use of the national schools. It is entitled “Nociones de Arqueologia Española.”

It appears that caves used as human habitations, cromlechs, logan stones, megalithic structures and cyclopean walls are found in many parts of Spain. Of the latter I shall instance the remarkable Iberian walls of Tarragona, and the Castello de Ibros, near Baeza. As to what are generally called Celtic monuments, they seem to be generally scattered through the country, particularly through the mountains of Andalusia, the Sierra Morena, the Cantabrian chain, Catalonia, and even Portugal. Rude vases of pottery, implements of stone, axes, arrow heads, &c., are very common, as well as celts, lance heads, palstaves, and other implements of bronze. In all their museums there are some of these, and I brought home a few examples. In the Museo Nacional Arqueologico of Madrid there is a large collection.

There are also some curious figures, which certainly belong to a very remote period, and have sorely puzzled the antiquaries (see fig. 4). They are called the *Toros de Guisando*, and sometimes *Marranos*. They are very rude representations of animals, roughly cut out of granite blocks.

By some they are supposed to represent bulls, by others, bears or wild boars. They are called of Guisando, because they were first discovered in a deserted tract between Avila and the Escorial, called Guisando. But there are several sets of these *Toros*. The representation here given is taken from a photograph of some preserved in a courtyard of one of the ancient palaces at Avila, in the Province of Ancient Castile.

Celts and palstaves are of very common occurrence ; and it is most remarkable that specimens with two loops are not considered of unusual occurrence (see fig. 5). In the Armeria real at Madrid there are two fine palstaves, each having two loops ; they are said to have been discovered in

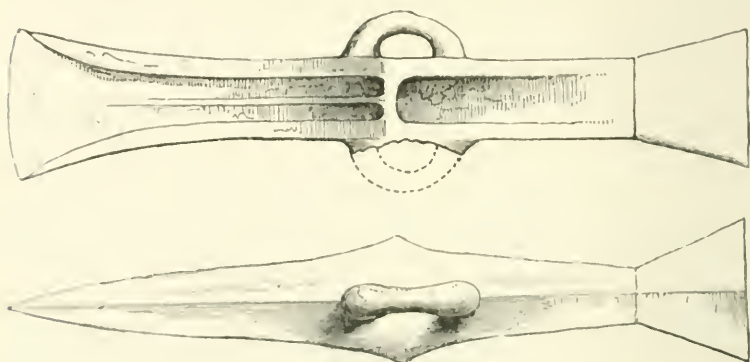


Fig. 5.—Palstave, with two side loops, found in the ancient Province of Asturias, North coast of Spain.

the north of Spain ; similar objects have also been found in Portugal. I saw a very fine example at Grenada. There is one in the Museum of the Royal Irish Academy, which I believe was found in Ireland ; another Irish example is in my own collection,² and a third, found in Somerset, is in the possession of Mr. Norris, of South Petherton.³

² Figured, Arch. Journ., vol. ix. p. 191 ; Catal. Museum R. I. Acad., p. 352.

³ No example of a socketed celt with a loop at each side has been noticed as found in the British islands. The moiety, however, of a stone mould for casting celts of this type was found at Chidbury Hill, near Everley, Wilts; it is in the possession of the Rev. E. Duke, and was exhibited by him in the Museum of the Institute at the Salisbury meeting. It

has been figured in "The Barrow Diggers," pl. v. p. 78. A similar peculiarity may be noticed in one of the matrices in a stone mould found in Anglesey, figured Arch. Journ., vol. iii. p. 257, and vol. vi. p. 358. A bronze socketed celt with two loops, found in a Tartar hut 15 miles N.W. of Kertch, and near the Sea of Azof, is preserved in the British Museum ; it is figured Arch. Journ., vol. xiv. p. 91.



Fig. 4.—Toros de Guisambio, or Matranos, now preserved at one of the ancient palaces at Avila.

I shall not allude to the discoveries made in the rock of Gibraltar, as they have been so well described by Dr. Busk and others. I may, however, mention that they belong to a recent geological formation, and have been accompanied with remains of man.

Mr. Evans ("Transactions of the Ethnological Society," vol. vii.) describes some interesting discoveries in Portugal. The Museum of the library of Evora contains some interesting arms of stone, which he calls club-celts, and a gouge also of stone. Mr. Evans notices some hatchets of amphibolic green schist, found in a cromlech at Alkogulo; a stone muller for corn in another cromlech in the same locality; also a hatchet, found at Castello de Vidè, Alentejo.

In the cave called Casa da Maura, near the village Serra-de El Ré, there are two deposits, both connected with human remains. The lower deposit consisted of flint flakes, a fragment of a sort of lance-head of bone, and other fragments. The upper deposit contained, mixed with human bones, hatchets of polished stone, knives, arrow-heads and other instruments of flint, bone, and stagshorn; fragments of rude pottery, black, with white grains of sand or calcareous spar, together with bones and teeth of animals, pebbles, flint and limestone flakes; small fragments of stone hatchets, and flat pieces of schist with designs upon them, which may have been used as amulets; charcoal; numerous shells of *Helix nemoralis* and *aspersa*, and some pierced valves of *pectunculus*, much worn; also a lance-head of bronze.

CASTILLEJO DE GUZMAN.

On the right bank of the Guadalquivir, on a low range of hills, one of which contains a Roman camp, at a distance of about three miles from Seville, is the noble farm and country residence of the Condé Castillejo de Guzman; and in a vineyard is the so-called *Cueva de la Pastora*, consisting of a long gallery or underground passage leading to a small circular chamber. It is constructed of undressed stones, without any mortar; the side walls of small ones, the covering stones of larger dimensions. It resembles in every respect the Picts' Houses of Ireland and Scotland, and might be said to be a miniature New Grange. There are at two intervals large stones for the support of jambs of a doorway. The length of the gallery is 27 metres, about 88 ft. It is barely

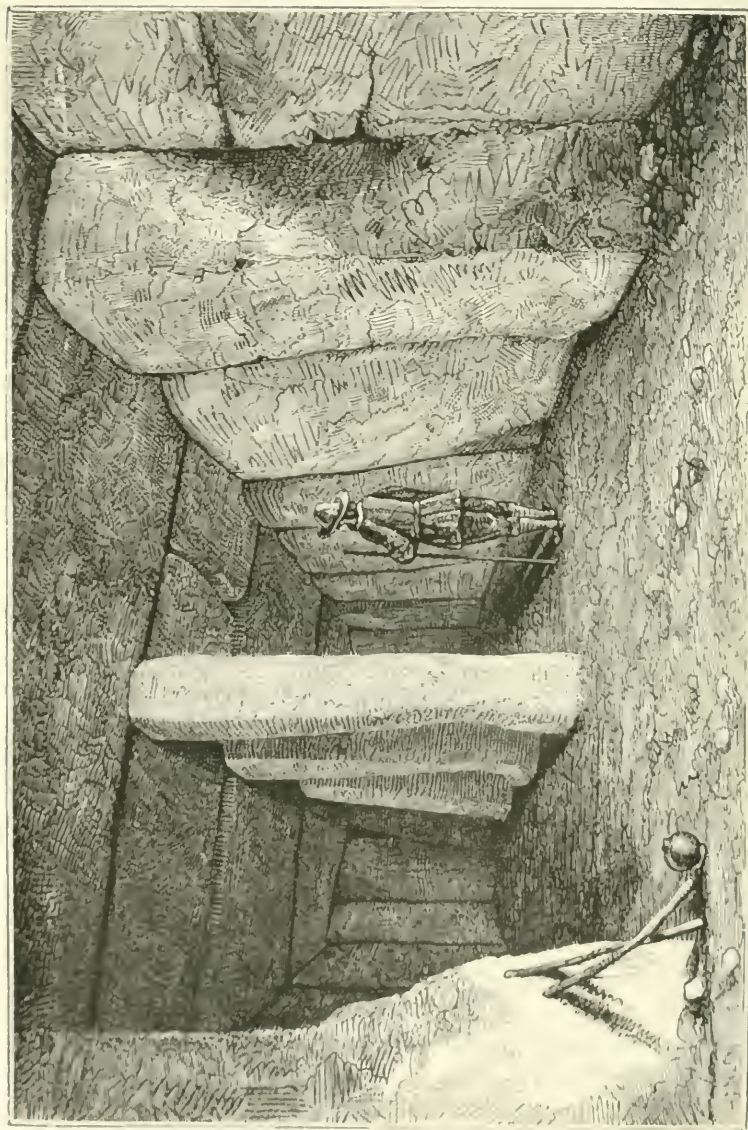


Fig. 6.—Cueva de Mengal, near the ancient city of Antequera, in the province of Malaga,

Interior view, from a memoir by Don Rafael Mitjona.

3 ft. wide, and its greatest height not above 6 ft. The doorways are situated, the front at about 36 ft. from the entrance; the second, at about 52 ft. further, close to the entrance of the circular chamber. This room is surrounded by a wall, consisting of two distinct bands of masonry, the lower one of small stones, the upper of large overlapping stones, which cover it in. Don Francisco Tubino, to whom Spanish Archæology owes so much, and who first called my attention to these remains, mentions in his luminous report on the discovery that he observed in the interstices of the stones in the circular chamber groups of fossil shells of the oyster kind. Signor Professor Villanova pronounces them to be the *Ostrea sacellus* or *caudata* of the miocene formation. I cannot say that I observed any.

CUEVA DE MENGAL.

This remarkable monument is situated in the immediate vicinity of the ancient City of Antequera, in the Province of Malaga.

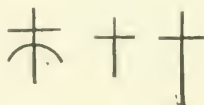
I shall not dilate on the many objects of interest which this picturesque town still affords, although its magnificent collection of Moorish armour was destroyed or dispersed, during the French occupation. It is on the site of a Roman town, and is full of Roman inscriptions, with other vestiges of the same period. The *Cueva* has been known for a considerable time, but has not long attracted the attention of antiquaries. In 1847 Don Rafael Mitjona published an essay upon it, with some illustrations, which I have borrowed for the present occasion. I have also given his measurements; but I will not trouble you with his theories, or discuss the question whether we owe this monument to the Celts or the Tarduli. It is covered with a small mound; but the ground has been so much cleared away, that not only is the entrance easily accessible but ample light has been admitted. It is very grand and imposing. (See fig. 6.) I believe there are similar monuments in Brittany and Touraine; but I have not had yet the advantage of visiting them. The cave extends from east to west. The entrance (fig. 7) is at the east; in length it is $86\frac{1}{2}$ Spanish feet, and the greatest width is 22 ft; the height is from 10 ft. to $10\frac{1}{2}$ ft. These are Spanish feet; but the difference between

an English and a Spanish foot is insignificant. (See the section and ground-plan, figs. 8, 9.)

The immense size of the stones is its most important feature. The side walls are more than 3 ft. thick, and consist of ten stones on each side, and one stone closes it at the end. The cave is covered in by five colossal slabs, which are partly supported by the lateral walls, and partly by three great pillars. The following are the dimensions of the covering stones, in the order as we enter the apartment :—

	Width.	Length.	Thickness.	Cubic Feet.
1.	16 Ft.	18 Ft.	4 Ft.	1,152
2.	$14\frac{1}{2}$	21	4	1,218
3.	$12\frac{1}{2}$	26	4	1,300
4.	16	27	$4\frac{1}{2}$	1,944
5.	23	27	$4\frac{1}{2}$	2,794

The stone is a limestone of the neighbourhood, and has no appearance of regular dressing, nor is there any mortar used. On one of the stones near the entrance I noticed three crosses of this form :—



DILAR.

A hunter, sporting at a place called Dilar, about two Spanish leagues from Granada, seventeen years ago, on the verge of the Sierra Nevada, came on some tumuli ; one of these mounds was resorted to by rabbits, and on attempting to dislodge them, he discovered a sepulchral chamber. This discovery was supposed to indicate a mine. A company was formed ; the whole tumulus was excavated, and all the stones that were not useful to an adjoining manufactory of baize were destroyed. Fortunately an artist of the name of Don Martino Rico appreciated their value, and made a sketch of their original state.

I visited the spot during my tour in 1867, and I regret that, with the exception of two large stones, which seem to have formed the entrance, there is nothing remaining *in situ*



Fig. 7.—Entrance, at the east end. Height, about 10 ft.



Fig. 8.—Section of the gallery. Length, about $86\frac{1}{2}$ ft.

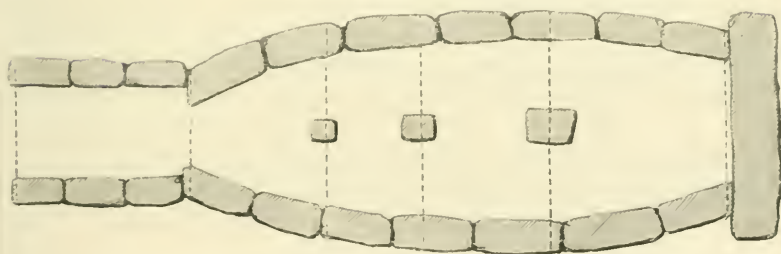


Fig. 9.—Ground plan. Length, about $86\frac{1}{2}$ ft., greatest width 22 ft.

Cueva di Mengal, in the Province of Malaga.

(see fig. 10). Their dimensions are—height, 245 in., and their front width is 317 in. There is an opening in the



Fig. 10.—Tumulus at Dilar, near Granada. Entrance, and megalithic jambs of the door-way.

door of 195 in. I also saw the stones which had been removed from thence, and have been used for flagging at the manufactory of Don Pedro Rogés. The dimensions of one of these are 242 in. in length, by 131 in. in breadth; another measures 262 in. by 124 in.

In the immediate vicinity of this unfortunate tumulus there are two other mounds, which have not been disturbed, and I trust are reserved for investigation in less troublous times.

Having exhausted the more remarkable monuments which I have visited, I shall conclude with some extracts from a remarkable work by Señor Don Manuel de Gongora y Martinez, entitled "*Antiquedades Prehistoricos de Andalucia*."

That distinguished archæologist describes the cave of Albuñol, near Motril, in the Province of Granada, vulgarly called *Cueva de los Murciélagos*, or Bats' Cave. It is situated on the side of a steep ravine, which is approached by a

steep path A. (see the accompanying ground-plan, fig. 11). It is in limestone rock. In this cave there were found at B. three skeletons. Around the skull of one of these there was a diadem of pure gold (see fig. 12) of twenty-four carats, weighing twenty-five *adármes*, about twelve drachms, and of the value of sixty dollars or about £12. At C. there lay three more skeletons, the skull of one of them was stuck between two large stones, and beside it a cap of *esparto*, (the Spanish broom, or *genista*) with fresh marks on it, apparently of blood. At D. twelve skeletons were discovered, surrounding the body of a female, admirably preserved, clothed in a garment of skin, open on the left side, and kept together in the middle by two straps interlaced. It had a necklace of *esparto*, from the rings of which hung marine shells, except the central one, which had a boar's tusk fashioned at the extremity; there were also ear-rings of black stone, without any opening, and probably fixed by a ring.

The skeleton with which was found the diadem, was clothed in a fine short tunic of *esparto*, the others in a like garment, though of somewhat coarser material; caps of the same, some with the cone folded back, others of a semicircular form; sandals of *esparto*, some of them elaborately worked. Close to the skeletons there were flint knives, hatchets, and other instruments, arrows, with flint points fixed to rough sticks with a very tenacious bitumen; rude but sharp arms of silex, some of them kept in purses of *esparto*; vessels of clay; a large piece of skin; very thick knives, and pickaxes of bone; spoons of wood, with large low bowls, very short handles, and a hole for suspension.

At E. lay upwards of fifty bodies, all with sandals and dresses of *esparto*, arms of stone, and a bone polisher. Each of the three skeletons at C. had a basket of *esparto*, varying in size from 6 in. to 15 in., two of them full of a kind of black arenaceous earth, probably food carbonized by time, and a variety of small baskets, with locks of hair, flowers, poppy-heads, and univalve shells. The skeletons were covered with flesh reduced to the condition of mummies; the dresses and baskets retained their original colors. The vases were very rude, but some of them with ornamental borders. They had spouts, handles, &c.; some of the fictile vessels were sun-dried, others baked.

This cave was discovered in 1831, but it was immediately



Fig. 11.—Ground-plan of the Cueva de los Murciélagos, a cave at Albuñol, Province of Granada.

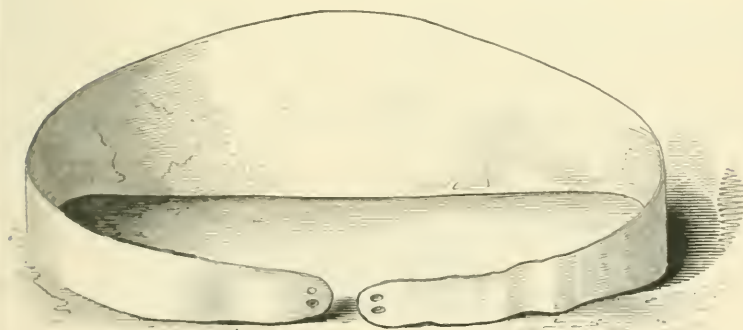


Fig. 12.—Gold diadem found on a skull, in the cave of Albuñol.
Weight about 12 drachms.

taken possession of by miners, who turned everything topsy-turvy in search of metals ; and, not finding any, they did much damage by their careless manner of scraping off the saltpetre which had accumulated on the walls of the cavern. However, Señor Don Gongora succeeded in securing specimens of all the objects discovered, mostly on the spot.

The gold diadem is still in existence, in the possession of Don Condres de Unzor.

In the same work there are descriptions of some very remarkable cromlechs in the Cañada de Hoyon, between Granada and Alcalà la real. The three following examples may be specially noticed :—*Dolmen del Hoyon*, *Dolmen del Herradero*, and *Dolmen de la Canada del Herradero*.

I wish also to call attention to the following monuments, illustrated in the same valuable work :—four *Dolmens* at *Mugadar del Conejo*, *Dolmen de las Ériales*, near which were found arms of bronze, and clay vessels, *Dolmen de las cuesta de los Chaparros*, and three *Dolmens* of *El Hoyo de las Cuevas del Congriel*. In one of these there was found an arrow head of stone (fig. 13), with three points. I have also given a representation of a copper palstave, with two side loops, found in the Sierra de Baza (see fig. 14).



Fig. 13.—Three pointed arrow-head of stone, found in a cromlech near Granada.



Fig. 14.—Copper palstave, with two side-loops, found in the Sierra de Baza.

CUEVA DEL GATO.

Within a few miles of the city of Ronda, by the lower road to Gibraltar, in the beautiful Val de Angostura, there

is a chasm in the mountains which form its northern boundary, through which there rushes a brawling stream to join the river below. Its sides are covered with a luxurious brushwood, and the most gorgeous wild plants.

Just below its opening there is a small cave, known as the *Cueva del Gato*, which is sometimes resorted to by the shepherds of the district. This, probably, was the abode of some of the wild tribes which peopled this country in primeval times. A stone celt was found there by a friend on the same day that I visited it. This relic is here figured; it is of a coarse-grained reddish-brown material; in form it is rudely wrought, and unusually unsymmetrical; about half an inch of the surface towards the lower extremity, or cutting edge, has been somewhat roughly polished. This part of the celt, as will be seen by the woodcut (fig. 15), had been chipped in use, and much injured.

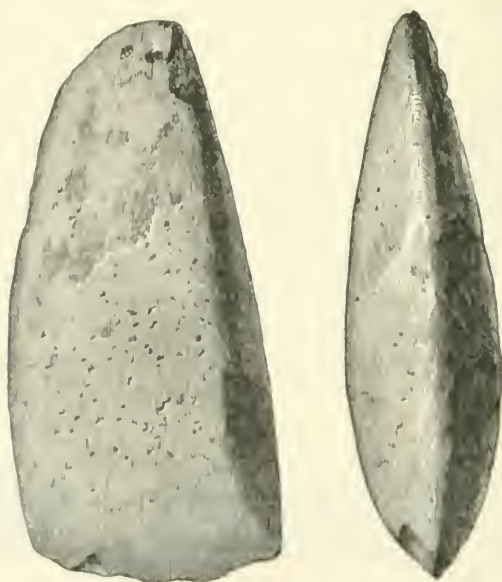


FIG. 15. Stone celt found at the *Cueva del Gato*, near Ronda, in Andalusia
(length of the original $4\frac{1}{2}$ in., breadth $2\frac{1}{4}$ in.)

In the possession of Lord Talbot de Malahide, F.R.S.

HAWARDEN CASTLE.

THE Hundred of Atiscross, in which Hawarden is an important parish, is, in Domesday, included in the county of Chester, and in that Hundred, as in very many parts of the Welsh border, the Saxons, as is well known from history and still evident from the prevailing names of places, early and in strength established themselves. But, although the power of the Earls of Chester and the perfectly Saxonized condition of the peninsula of West Chester gave the invaders a secure hold over the open country on the west bank of the Dee, their sway was contested on the higher and more rugged ground, and though such names as Hope, Northop, Holywell, Whitford, Newmarket, Soughton, and Ryden show that they had settlements in the central and northern parts of Flintshire, the presence of a still larger number of Welsh names show that their occupation was actively contested and the very reverse of secure.

The length and severity of the struggle is also made evident by the number and magnitude of the various military earth-works which still attract attention. Such of these as are situated on the summits of hills, are of irregular form, and bear Welsh names, may safely be attributed to the Welsh, while those of Saxon origin, usually on more accessible ground, have a tendency to a circular form, and in some very marked instances are characterized by a central mound, such as is seen at Shrewsbury and Cardiff, and has been removed from Worcester and Hereford.

Hawarden, the Haordine of Domesday, and in Welsh called "Penard Halawg," said to mean "the steep head of the marsh," is, as its name declares, a Saxon settlement, and its fortress, so long preserved, presents in a remarkable degree the features of a well-known class of earth-works found both in England and in Normandy. The parish, containing about 16,000 acres, occupies the eastern or English

end of the first high ground that rises west of the Dee. It includes the commencement of a wooded ridge, which runs for some way parallel to the estuary, and then trends inland to be lost in the higher country around Northop.

The castle stands at the south-west end of a considerable area of level sward, upon which is built the later house of Hawarden, and which, with a deep ravine bounding it on the south and west, is included in the park.

The ground occupied by the castle and its earth-works covers an irregular circle of about 150 yards diameter. It rises steeply about 50ft. from the level area, and almost abruptly 150 ft. to 200 ft. from the ravine that protects it on the south, south-east, and west.

At the central and highest point of this ground, composed in part of rock and in part of the red sandy soil of the district, has been formed by scarping down, with perhaps some little addition in height, a conical mound, the flat top of which is about 70 ft. diameter, having steep slopes all around. On the north-east side, or that towards the house, the descent is about 30 ft. at which level is a platform occupied by the main ward of the fortress, and beyond it, near the foot of a further but gentle slope, a broad and deep ditch, dry and wholly artificial, which sweeps round this the weakest side, and cuts it off from the area already mentioned.

About the other two-thirds of its circumference, towards south and west, the mound descends rapidly to the ravine, but on its way the slope is broken by concentric banks, ditches, and shelves, of somewhat irregular height, depth, and configuration, owing no doubt to their having been originally natural, but converted and strengthened by art.

This kind of fortification by mound, bank, and ditch is well known both in England and Normandy, and was in use in the ninth and tenth, and even in the eleventh centuries, before masonry was general. The mound was crowned with a strong circular house of timber, probably constructed like the walls of Greenstead chancel, and such as in the Bayeux tapestry the soldiers are attempting to set on fire. The court below and the banks beyond the ditches were fenced with palisades and defences of that character.

The Normans in Normandy, towards the middle of the eleventh century, and in England a little later, and onwards

into the reign of Henry II. commonly replaced these defences by more substantial walls of masonry, which, being of great thickness and solidity, have often remained to the present day, though more frequently they were removed in the reigns of the earlier Edwards, to be replaced by structures of more scientific though less solid design, affording more accommodation within the enceinte. At Hawarden the course of action seems to have been different. Here are no traces of Norman work or of the Norman style, and though the keep is unusually substantial, it bears evidence of being the work of one period, and that the close of the reign of Henry III., or early in that of Edward, his Welsh-compelling son. If this be so, it must be concluded that the Norman barons, who were known to have held Hawarden in the twelfth century, were content to allow its defences to be formed of timber, as any masonry by them constructed would scarcely so soon have needed to be removed.

The keep (A in the plan) very nearly covers the top of the mound. It is circular, 61 ft. across at the base, and originally about 40 ft. high. The base gathers inwards to a height of 5 ft., where the cylinder is 59 ft. across, and from hence to the summit it further diminishes to 57 ft. The interior is vertical, and 31 ft. diameter throughout; hence the wall, which is 15 ft. thick at the base, and 14 ft. a little above it, is 13 ft. at the level of the rampart walk; dimensions of unusual solidity, even at the Norman period, and rare indeed in England under Henry III. or the Edwards.

The exterior is very plain, having neither cordon, nor string course, nor window labels. A little above the ground is a double course of large ashlar blocks of a light yellow sandstone, tying the work firmly together, and higher up are other bonding courses of a less substantial character. The ordinary material is a bluish stone laid as rubble work, with the spaces and joints neatly filled up with spawls and fragments. The battlements have been replaced by a modern wall, but the junction, at the rampart waik, may be readily detected.

The entrance is at the ground level on the north-east side, from the main ward. It is marked by a broad flat buttress, rather Norman in character, which rises vertically from the common base so as to stand out about 18 in. where it dies into the wall about 5 ft. below the battlements. In its

centre is the gateway, and above, the window of the portcullis chamber. It is extended laterally in two wings, rising about half its height, and also dying into the wall above. These are intended to strengthen the wall, weakened by a well-stair and a lodge. As this buttress covers a considerable segment of the circle, and is flat, it is broken into three planes by two vertical angles. The modern brick and stone wall replacing the battlement is rugged and broken, but in parts about 12 ft. high, and intended to give elevation to the keep. The building thus made extensively visible has become a sort of parish cynosure, and however irregular its appearance, it would scarcely be in good taste to remove the addition.

The keep has two floors. The lower is cylindrical, 31 ft. in diameter, with walls 14 ft. to 15 ft. thick. It was about 14 ft. high, with a ceiling of logs, which rested upon some forty plain corbels, of which about seventeen remain. At two opposite points, about half way up the wall, are two larger corbels, which evidently supported the struts destined to give stiffness to the central and longest beam.

This chamber, no doubt a store-room, save when in time of siege it might accommodate soldiers, was entered direct from the gateway, and rather ventilated than lighted by three equidistant openings, about 4 ft. from the floor, 4 ft. broad, and 5 ft. high, having shouldered heads and within a shouldered covering. The sides converge, and the floor rises to a small square-headed loop of 4 in. opening. There is neither fire-place, seat, nor recess. The floor has been removed. There is no subterranean chamber.

The upper chamber within is an octagon, inscribed about the cylinder below, with walls from 13 ft. to 14 ft. thick, and from side to side 31 ft. It is about 15 ft. high to the corbels that carried its flat roof, and a row of larger corbels along one of the remaining faces seems to have supported struts necessary to make the roof a safe platform for military engines and stone ammunition. This, which was a state-room, was lighted by three recesses at irregular distances. They are 6 ft. 6 in. wide, and rise from the floor 8 ft., being covered by slightly-pointed drop arches. Each has a vaulted roof and parallel sides, which afterwards converge upon a square-headed window, 2 ft. wide, and 5 ft. 6 in. high, having a plain chamfer outside. In each side

of the recesses is a plain shouldered doorway, 3 ft. 9 in. broad by 10 ft. high, opening into the mural gallery.

This floor has its main entrance through the portcullis chamber, and next north-west of this entrance is the chapel. This is a mural chamber, 14 ft. by 7 ft., but not quite rectangular. It is flat vaulted, and its axis points south-east to the altar, which is a restoration. The doorway next the west end is only 2 ft. broad by 7 ft. high, with a cinquefoiled head, and a plain moulding of decorated character. The door opened inwards, and could be barred within the chapel. On the same side, but near the altar is a small cinquefoiled recess for a piscina, with a projecting bracket and a fluted foot. In the opposite wall, in vaulted recesses, are two windows, that next the altar square-headed, the other lancet-headed. Against the west wall is a stone bench, and above it a rude squint through which any person in the adjacent window recess could see the altar.

The entrance to the keep is by a gateway 5 ft wide and 6 ft. 6 in. high, having a drop arch rising about 3 ft. more. The jambs have a single, and the arch a double chamber. Two feet within is the portcullis groove, 4 in. square, and next is the rebate for the door, with its bar holes. Beyond is the vaulted passage, 6 ft. broad, leading to the ground-floor, with a door opening so as to be barred against that chamber; within, however, is a narrow rebate, as though for a lighter door opening inwards. The portcullis grooves are stopped 3 ft. above the floor, so that either the cill must have been obstructively high, or the grate have terminated in a range of long spikes. On each side of the entrance-passage is a shouldered doorway. That on the right, 2 ft. 9 in. broad, opens into a mural lodge, vaulted, 6 ft. by 9 ft., with a lancet loop to the field. On the left the door is 3 ft. 3 in. broad, and opens on a well-stair, which, lighted from the field by loops, ascends to the upper floor and the battlements.

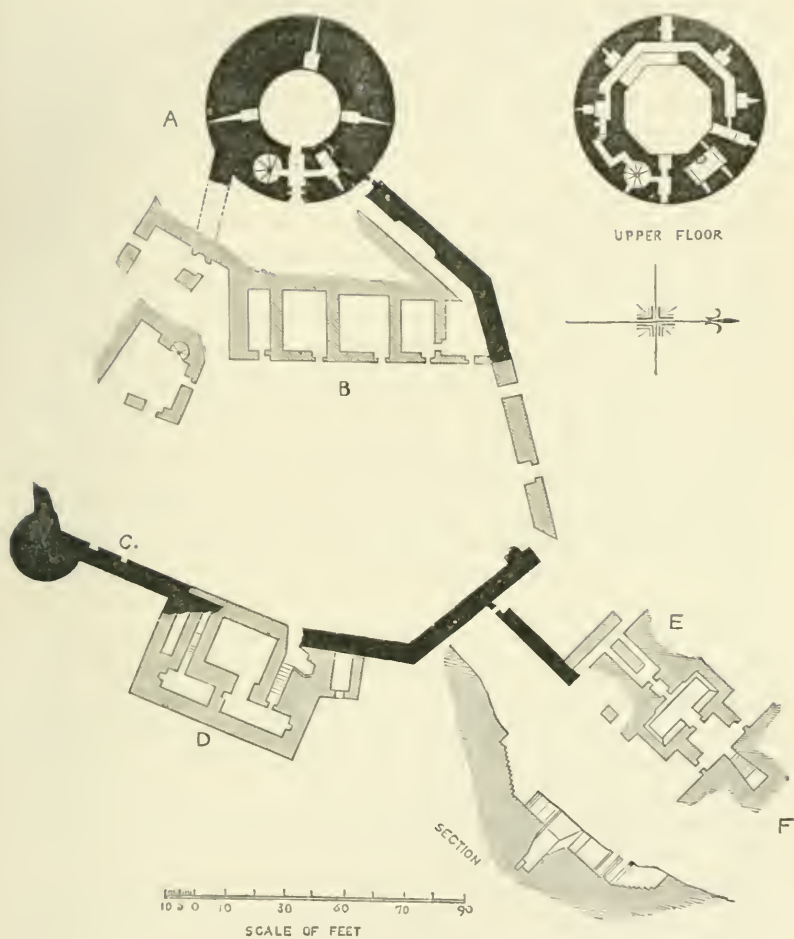
Twenty-one steps lead to the portcullis-chamber, which is also the antechamber to the state-room. It is vaulted, 6 ft. broad by 10 ft. long, with a square-headed window of 2 ft. opening to the field, and within it the chase for working the portcullis. At the other end a large doorway with a plain moulding of a decorated type, and an arch very

nearly, if not quite, roundheaded, opens in a recess similarly arched, and this into the state-room. The door was barred inside, so as to be held against the stairs.

Returning to the well-stair, the upper part of which is broken away, at twenty-nine steps from the base is a small lancet-headed door. It opens into a mural passage, 2 ft. 6 in. broad, and 7 ft. high, which makes two turns at right angles. At one, on the left, is a recess, 3 ft. deep by 1 ft. 9 in. broad, a garde-robe, the back part of which, probably bratticed off, carried a shaft from a similar recess on the ramparts. At its second turn the passage descends seven steps to the nearest window recess in the main chamber, crossing which an opposite doorway leads into the mural gallery. The ascent and descent in the narrow passage is rendered necessary by the level of the steps of the well-stair.

The mural gallery, at the main chamber level, is continued within the substance of the wall, to the recess next the chapel. It is in plan a polygon parallel with the inner faces of the wall. It is 10 ft. high and 3 ft. 9 in. wide, having a flagged roof resting on a double tier of corbels, and in it are three large recesses, each opening to the field by a long loop, swallow-tailed at each end. These recesses and loops are not seen from the main chamber. The doors and window eaves, where original, are executed in straw-coloured sandstone. The chapel doorway and piscina, and the side doors of the window recesses seem of later decorated work than the rest, and may be insertions, though this does not look probable.

The keep, as at Tamworth, Durham, Berkhamstead, Warwick, and Cardiff, stands in the enceinte line of the main ward, and forms part of it, about two-thirds of its circumference being outside, and one-third, including the doorway, inside the curtain. This curtain was about 460 ft. in length, and encircles the main ward, abutting against the keep at two points; one 24 ft. south, and one 18 ft. north of the entrance. On each side it is carried down the slope, and meeting below, thus encloses a somewhat fan-shaped area, about 170 ft. north-east and south-west, by 142 ft. north-west and south-east, within which were the principal buildings of the fortress. The southern part of this curtain can be traced, but in its foundation only; that to the north



HAWARDEN CASTLE, FLINTSHIRE, 1870.

Ground Plan, from a Survey made by Mr. James Harrison of Chester, in 1857.

- A. The Keep. B. The Main Ward. C. Site of the Hall. D. Offices. E. Entrance ; below which is its section. F. Place of the Barbican.

is tolerably perfect.' It is 7 ft. thick, and has been about 25 ft. high. It does not, as at Tamworth, so ascend the mound that its ramparts terminate at the level of the base of the keep, but it abuts against the keep at a height of 12 or 14 feet, and is so continued down the slope. Up the mound the rampart of the curtain, as at Windsor, was a flight of steps, but as the ramparts only abutted against, and had no doorway into the keep, the steps were merely to enable the defenders to man every part of the wall. On the north side, besides these steps there was a second flight, laid on the surface of the mound, behind and at the foot of the curtain, and probably covered over, as traces remain of a second wall. These led to the entrance to the keep, and were the communication between it and the main ward.

At the junction of this curtain with the keep is a postern, a small shouldered doorway with a door barred within, whence an enemy who had reached the foot of the keep could be attacked. About 90 ft. lower down are traces of a similar doorway, whence the base of the mound could be reached. Of the south curtain a fragment remains attached to the keep; it had no postern, and probably no steps behind it.

The main ward (B in the plan) is divided into two parts; the one a level platform, in which stood the hall and other buildings, round a court about 125 ft. by 92 ft., and into which was the main entrance, and the other, and much smaller part, is the steep slope of the mound, about 50 ft. broad, and which was probably left rugged and useless as we now see it. At the foot of this slope are the remains of four rooms, about 18 ft. deep from the face, probably for stores, each with a doorway to the Court; in the wall of one is a sort of rude drain as from a sink or trough. This range was evidently continued along the south end of the court, being built against the curtain and carried on to the hall. Of these extensions only the excavated ground-floor, some low walls, and the base of a well-stair remain. From the character of the stair it looks as though it had been of some consequence, and it shows that there was an upper floor, probably of rooms communicating with the hall, and perhaps connecting it with the keep.

At the opposite, or north end of the store-room range is the doorway at the foot of the stairs leading to the keep,

and beyond this, in the curtain wall, a door which seems to have led into a well-stair which gave access to the stepped rampart. Again, a few feet beyond this, at an angle of the enclosure, are the fragments of the great gateway beyond which, for about 100 ft. round the north angle of the court, the curtain is of full height and very perfect, having angle-quoins of the same yellow ashlar used in the keep.

The hall (C) is placed on the east face of the ward, at its south end, and occupied above one-half of that face. The curtain formed its outer wall and was pierced by its windows, and strengthened at its south-east angle by a solid half-round buttress, 22 ft. diameter, probably an addition. The hall was on the first floor, the low basement being probably a cellar, and entered by a vaulted passage at its south end. The hall was about 30 ft. high from its timber floor to its wall plate. Two lofty windows remain, and traces of a third, and between them are the plain chamfered corbels whence sprung the open roof. The window recesses have a low pointed arch and a bold bead moulding. The windows are of one light, trefoiled, with the cusp lights worked. There is no label. Within the recess are lateral seats.

North of and connected with the hall, is a rectangular projection (D), 36 ft. deep by 60 ft. in front, the lower floors of which are laid on the scarp of the ditch, considerably below the level of the ward. These were doubtless offices, but as nothing but the lower walls remain, little can be discovered of their detail. There remains, however, in the curtain the jamb of a large doorway, whence descends a flight of steps about 20 ft. probably to a postern, of which, however, there are no traces, on the edge of the ditch. These steps led into one of two apartments, at one end of each of which is what was probably a fire-place, though they more resemble the vent of a garde-robe shaft, which, however, they cannot well be, since the chambers were certainly not cesspools. The walls of this projection are substantial, and certainly carried an upper story, probably occupied by withdrawing-rooms and private apartments attached to the hall. No well has been discovered, nor oven, nor any signs of a garrison chapel, all which were probably placed in this ward.

The great gateway opened in the north-west face of the curtain, and from the fragment of a jamb that remains, and

the bold rebate, seems to have been about 8 ft. high, and broad in proportion. A projection inwards from the curtain shows that there was some kind of small gatehouse.

This gateway opened into a spur work formed by two curtains, 32 ft. apart, projecting from the main curtain down the scarp of the ditch, so as to form a parallelogram 40 ft. wide by 68 ft. long. The curtains are 4 ft. thick and about 24 ft. high. The western indeed is destroyed, but the eastern is tolerably perfect, and at its junction with the main curtain is a shouldered postern door, 2 ft. 9 in. broad, which opened on the scarp of the ditch.

At the further and lower end of the spur-work the walls turn inward (E in the plan), and again proceed parallel for 14 ft. at 27 ft. apart, and there contain the gates and pit of the drawbridge, beyond which a second narrowing reduces the distance to 21 ft., at which they proceed for 14 ft. more, when the walls abut upon the counterscarp of the ditch, at that point revetted with ashlar. Thus the whole length of the spur-work, from the main curtain to the counterscarp, is 96 ft., and its breadths, over all, 40 ft., 25 ft., and 21 ft.

About 34 ft. in advance of the great gateway was a cross wall, probably containing a second gate, and beyond it is a flight of fifteen steps, 6 ft. broad, leading down into a rectangular chamber, which has had a flat timber roof, and in the opposite wall of which is a shouldered doorway, without a door, 2 ft. 9 in. broad, and 7 ft. high. This opens into a low, narrow, flat-topped passage, 3 ft. broad and 10 ft. long, but expanded at the centre to 3 ft. 6 in., so that two persons could pass, by squeezing; and at this point, in the roof, is a hole 8 in. square, evidently for the purpose of attacking them if necessary. The passage ends in a second small doorway, barred from the inside, which opens upon a bridge-pit, about 27 ft. long right and left, 12 ft. deep, and 10 ft. broad, to a similar doorway opposite. The pit is lined with rubble below the door cills and with ashlar above, and at its west end is a hole, probably for cleaning it out, and communicating with the main ditch, of which the pit is an isolated part.

Crossing over a narrow plank bridge, the further door leads through a short narrow passage into a chamber 13 ft. square, entirely of ashlar, and having, right and left, a small door, 2 ft. 9 in. broad, opening upon the counterscarp

of the ditch. The doorway from the bridge had no door, but those of the lateral sally-ports opened inwards. In the further, or north wall is another doorway, also shouldered, 3 ft. broad and 8 ft. high, the door of which also opened inwards and disclosed a very steep flight of eleven steps, rising about 8 ft. in a dovetail-shaped chamber, commencing at a breadth of 3 ft. and expanding to 8 ft. It is 14 ft. long. The steps land on a floor, but the walls, of which the lower 6 ft. 6 in., of ashlar, are quite perfect, have so far no openings. This singular chamber is niched into the counterscarp of the ditch, and is actually within the barbican.

The remains of the barbican (F) are a considerable knoll of earth, having a ditch of its own, and on its rugged surface showing traces of old buildings. This covers the head of the bridge, and appears to have been approached by a winding road, and entered on the west side.

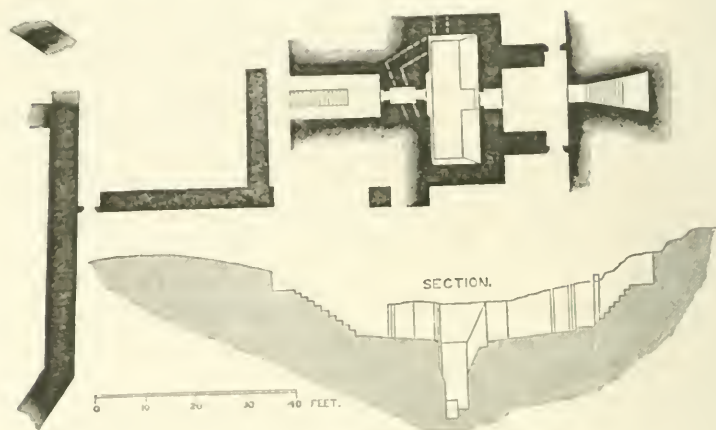
This work has been the subject of much speculation. That it was the main entrance is sufficiently certain. This could only have been at one end of the main ward, and the remaining jamb is too large for a postern, and the ground at the opposite end far too steep for an approach.

The spur-work, with its lateral curtains, completely enclosed the entrance. The steps to the bridge are modern, but must represent others somewhat similar. The doors and passage were calculated for single files only, with a special arrangement for commanding the only point at which two armed men could pass. In the chamber beyond the bridge 80 or 100 men could assemble previous to a sally by the lateral doorways.

On their return, also, if pursued, and the enemy should re-enter with them, the narrow passages would make almost impossible a surprise or any sudden rush into either the body of the place or the barbican.

Further, looking to the lateral space between the walls, and the great length of the bridge-pit, it is pretty clear that above the foot passage was a roadway for wheel carriages, with at least one drawbridge. Most of the passages below seem to have been flagged with stone. One drawbridge was clearly over the remaining pit; another may have covered the chamber at this time occupied by the modern flight of stairs. The thickness (4 ft.) and solidity of the existing walls show that they must have been much higher, so that

they would have formed lateral parapets, concealing the passage of the bridge. For this, about 15 ft. might be added to the existing wall.



Spur-work enclosing the main entrance.
Hawarden Castle. North-East side.

The fan-shaped chamber was probably an outlet for those who, having used the foot bridge, did not wish to go out by the sally ports, but to ascend into the barbican. The steps are no doubt inconvenient, but the whole passage was certainly only meant for occasional use, and is in no part particularly commodious. Probably the means of egress from the stair-head into the barbican were stairs of timber. The whole arrangement is very peculiar, and it may be doubted whether the safety proposed was worth the considerable expense bestowed upon it. As the whole of this bridge arrangement is clearly an addition, it is probable that though the original entrance was at this point, it was by an ordinary drawbridge, of which the lateral curtains of the spur-work, which are old, would be the protection.

Of the exterior earthworks there is little to be said. On the south-east side of the fortress the outer bank is cut through, as though for an entrance. If so, this must have been carried laterally along the ditches of the place until it reached the barbican.

Hawarden seems to present traces of at least three periods of construction, the oldest being that of the earth-

works, which, like some similar ones in England, may be as early as the tenth century.

The keep, the curtain of the main ward, the hall, and perhaps the curtains of the spur seem to be of one date, the material employed being substantially the same, and the workmanship not unlike.

The range of storehouses in the main ward, the offices projecting from it towards the north-east, and the whole of the buildings of the foot entrance are of later date, and of different design, material, and workmanship. The material is a greenish sandstone, and the workmanship ashlar of the most expensive kind, dressed on every face, and laid in thin joints, with but little mortar. This excellence has proved fatal to the structure ; for as the stones needed only to be lifted from their beds and laid, without any adaptation, into any new work, the temptation has proved too strong, and most of this later work has been carefully removed by hand, and not, like the older work, overthrown by gunpowder. In fact the lower walls that remain have much more the appearance of an unfinished than of a partially destroyed building.

There is a paper by the late Mr. Hartshorne in the fifteenth volume of the *Archæological Journal*, which, though it touches but lightly upon the topography of the castle, enters at some length upon the history of the Barons of Montalt, long its owners. From thence, and from other sources, it appears that Hawarden belonged, from a very early period, to the Earls of Chester, some of whom probably constructed it, and no doubt occupied it after the Saxon fashion. In their line it remained till the death of Ranulph de Blundeville, the last earl, in 1231, when, with Castle Rising and the "Earl's Half," in Coventry, it came to his second sister and co-heir, Mabel, who married William d'Albini, third Earl of Arundel. Their second son, Hugh, who inherited, died in 1243, when the estates passed to his second sister and co-heir, Cecilia, who married Robert de Montalt.

The Barons de Monte-Alto, sometimes styled de Moaldis or Mouhaut (Mold, where the mound of the castle remains), were hereditary seneschals of Chester and lords of Mold. Roger de Montalt, grandson of Robert and Cecilia, inherited Hawarden, Coventry, and Castle Rising. He married Julian, daughter of Roger de Clifford, justice of North Wales, but

dying childless, in 1297, his lands passed to his brother Robert, the seventh and last lord, who died childless, 1329, when the barony became extinct. Robert de Montalt signed the celebrated letter to the pope in 1300, as Dominus de Hawardyn. [P. Writs, I. 743.] He bequeathed his estates to Isabella, the queen of Edward II.

The entries concerning Hawarden in the public records are few. In 1265, 49 H. III, the king granted to Llewelyn ap Griffith, prince of Wales, the castle of Hawardin, to him and the heirs of his body, Hereford, 22nd June [N. Fœd. I. 457], but in 1267, 51 H. III., by a letter by the legate Ottoboni, Prince Llewelyn is at once to restore to Robert de Otto Monte the lands of Ha Wordin, but Robert is not to build a castle there for thirty years. Montgomery 3 Kal. Oct. [Ibid. p. 474.]

In the Inquisitions and Escheats are also some entries. From an inquisition, 3 Ed. I. Robert de Monte Alto is seised of the manor of Hawardine, co. Cest. His possessions were extensive. They occupy 91 entries in 13 counties. [Inq. p.m. I. 55.] In the next year, 4 Ed. I., is an inquisition, whence it appears that the manor was never settled in dower. Neither Leuca, wife of Robt. de Montalt the Black, nor Matilda, wife of Ralph de M., nor Nicholaa, wife of Roger de M. the elder, nor Cecilia, wife of Roger the younger—all ladies of the Honour of Hawirdyn—were ever so endowed. [Ib. 60, Cal. Geneal. I. 247.] 10 Ed. I. 25 March, is an entry on the Welsh roll concerning the pursuing and taking certain Welsh malefactors, who took captive Roger de Clifford in the king's castles of Hawardin and Flint [Ayloffe, p. 76], and from the king's writ itself of that date, addressed to Roger de Mortimer, and given at length by Mr. Hartshorne, it appears that the Welsh attacked Hawarden by night, killed some of de Clifford's household, and burnt the castle houses, and did much the same at Flint. This outrage was repeated in the next year, when (6 Nov. 1282) the justice's elder son, also Roger Clifford, was slain. [Foss' Judges, III. 76.] The next entry in the inquisition is one of 25 Ed. I. on Roger de Montalt, whence it appears that at that time, though he held Castle Rising, &c., the manor of Hanwerthyn was vested in Thomas de Offeleye. This might, however, be as feoffee in trust. [Inq. p.m. I. 134.]

From all this it may be inferred that there was a castle here which Prince Llewelyn destroyed, and which Robert de Montalt undertook not to rebuild. Such promises went for as little then as between nations at the present day, and the castle that the Welsh took 10 Ed. II. 1282, was of course built or restored during that period. If Llewelyn had found a keep of anything at all approaching in substance to the present he could scarcely have destroyed it; nor does it seem probable, from the internal evidence of the building, that the keep now standing was the work taken by the Welsh, 10 Ed. I. Its mouldings and the plan of its upper floor point to a rather later date; and probably it was the work of the last Baron de Montalt, between 1297 and 1329. Cylindrical keep towers, of a pattern not unlike that of Hawarden, though usually, as at Courcy, on a much larger scale, were in use in France in the earlier part of the thirteenth century; and although the unusual thickness of the walls in the present example might be thought more in keeping with the Norman period, the general details, the polygonal mural gallery and interior, and the entrance, evidently parts of the original work, are very decidedly Edwardian.

Hawarden was finally dismantled by order of parliament, in the time of the Commonwealth, and the keep much shattered by a mine, sprung probably under the doorway. It so remained until very recently, when it was restored by Sir Stephen Glynne, the present owner, under the advice of Mr. Shaw, of Chester. The task was one of exceeding delicacy, but it has been executed with marvellous skill and complete success, so far as the work has proceeded. Enough remained of each part to give a clue for its reproduction, and thus the gateway, portcullis chamber, much of the well staircase, most of the chapel, and part of the great mural gallery have been restored just as they must have been left by the original builder. At the same time the stone employed and the mode of dressing it, will always indicate to the skilled observer which parts of the work have been replaced.

The present access to the rampart is an addition in brick of the last century, and will probably in due time be removed. The view thence is extensive, having in the foreground the park, which for wildness and sylvan beauty may well compare with any ground even on the Welsh border; and beyond is the broad and fertile plain of Cheshire and

Shropshire, including the city of Chester, the rock and ridge of Beeston, and, in clear weather, the Wrekin. In the opposite direction are views, less extensive, of the estuary of the Dee and the peninsula of West Chester. The Welsh view is inconsiderable, being cut off by the higher ground.

It is laid to the charge of Sir John Glynne, that he made free with the materials of the castle, and so provided an ample field for antiquarian speculation. Even, however, though this be so, it must be admitted that his descendant has done his best to atone for the spoliation. No ruin in the kingdom is more carefully preserved, or situated to more advantage; the spreading oaks and fantastic beeches that rise from its velvet slopes beautify without concealing the structure, and when circumstances require their removal, they fall before the axe of no unskilled or vulgar woodman.

G. T. CLARK.

DOWLAIS, 1870.

ON A SCULPTURED CAPITAL IN THE CATHEDRAL OF AUTUN.

By Mr. J. G. WALLER.

THE Cathedral of Autun, in which this sculptured Capital is found, was completed about the middle of the twelfth century. It is remarkable for having copied in its details many portions of Roman work yet existing in the city, notably that of the *Porte d'Arroux*. The fluted pilasters in the latter are imitated in the cathedral, and form a very remarkable feature. It is on one of the piers of the nave, forming a capital to a pilaster, such as alluded to, that this curious piece of sculpture is found.



It represents a performance upon bells, which is certainly singular. Probably the difficulties of the task are its chief recommendation. The principal performer seems to have

suspended himself to a cross, on which depend a number of bells, two of which he is ringing with his hands, another appears through a slit in his tunic, and perhaps is fastened to his thigh, and besides he appears to be going through a kind of jig at the same time. On each side of him is a companion, each of whom is striking the clapper of one of the bells suspended from the cross, and one is ringing another he holds in his hand.

This very extraordinary musical performance may be recorded thus to notify a benefaction to the structure by some company of minstrels; perhaps the pier on which it is carved might be erected at their expense, and the sculpture a representation of their last invention in the minstrel's or *jongleur's* art.

ON THE SARCOPHAGUS OF VALERIUS AMANDINUS,
DISCOVERED AT WESTMINSTER.

By the Rev. J. G. JOYCE, B.A., F.S.A., R.D., Rector of Strathfieldsaye.

THE substance of the following remarks on the tomb of Valerius Amandinus has already been submitted to the Very Rev. the Dean of Westminster, and is now brought forward at his wish. Were it not so, it might seem somewhat presumptuous on my part to venture to address you on a subject which has engaged the attention of some of our most eminent archæologists, and on which papers of very great ability have been read. I have been indebted to the Dean's kindness for the fullest permission to examine this remarkable tomb on more occasions than one, and have obtained careful impressions both from its inscription and its lid. Having compared the results with various records and memorials of Roman date, I have arrived at certain opinions as to the tomb and lid which do not agree with those that appear most prevailing. I communicated to the Dean the grounds on which my opinions have been formed, and he has thought them of sufficient importance at least to be propounded for discussion. I am quite aware that judgments of the greatest weight may be found adverse to mine, but I would say (though with much diffidence) that if the conclusions I seek to establish should prove themselves to be reasonable and sound, we shall have raised a claim for this sarcophagus of Westminster to be regarded as one of the most interesting Roman monuments preserved to our times, whether in England or on the continent of Europe, or even in Imperial Rome itself.

The prevailing view at present appears to be that the sarcophagus is of the second or third century, and that the lid belongs to a wholly different date, probably later by some hundreds of years. The opinion I am about to advocate now is that the sarcophagus belongs to the period of Theodosius

the great, that is the last decades of the fourth century—A.D. 380—400, and that the lid is the original cover of the tomb, and of the same date.

I purposely avoid recurring to the remains contained within the tomb. They may have been those of a second occupant, as it clearly was not found in its original place, and had undergone extreme violence to wrench off its cover, which is broken into many pieces, though the coffin itself is singularly uninjured. The lid found on it was undoubtedly forced, and that at a most remote period, as indicated by the depth at which it lay.

The tomb is of great size, its cover being 7 ft. 1 in. long and 2 ft. 4½ in. across, at the widest part. No doubt has been expressed as to the fact that the shelly oolite, of which both tomb and lid are made, came from the same beds. The great size of the stone coffin is one indication of its lateness, as a Roman tomb.

At the first glance it may seem as if there were but little to guide our judgment in the coffin itself. I shall examine it separately from the lid, and I shall inquire whether it contains any internal evidence by which to conjecture its date, from the names, the style, or the lettering of the inscription.

The Dean of Westminster has already pointed out, as regards the names, that neither the father to whom the tomb was erected, nor the sons who had it made, are described by the "*Tria nomina*." This shows that its period must fall later than the middle of the third century. Now the name Valerius, if considered with regard to its frequency, whether on coins or inscriptions, is peculiarly attributable to the fourth century. It came into popular use after Diocletian ascended the throne, until which date the imperial names were Marcus Aurelius. The prevalence of these at the end of the third century, may be traced in the curious fact that between the year 250 A.D. and 300 A.D. the Emperors Claudius II., Quintillus, Probus, Carus, Numerianus, Carinus, and Maximianus Herculius, are all severally styled, upon some of the coins they struck, by the two names "*Marcus Aurelius*," placed before the appellation by which they are better known. With Diocletian, Valerius was introduced as an imperial name, to the complete exclusion of those which had been before so much favoured, and it will be found on the coins

of Constantius I., Gal. Maximianus, Severus II., Maximinus Daza, Maxentius, the two Licinii, Constantine the Great, and Constantius II., as their common Gentile designation. The last-mentioned reign carries this name on into the second half of the fourth century. Therefore, if we call to mind that Roman inscriptions, wherever found, testify to the fact that the imperial names were much in vogue, then, other circumstances concurring, there would be an *à priori* probability that the tomb of a Valerius belonged to some period during the century in which Valerii¹ were rulers of the world.

I am able to offer one singularly interesting parallel to this inscription on the Westminster tomb. It states, as you are aware, that the two Valerii, Superventor and Marcellus, had made this memorial to their father, Valerius Amandinus. There is on record another inscription remarkably like it. A sepulchral slab was found at Arles, inscribed to Titus² Valerius; and curious to say, this memorial also was erected to a father's memory by his two sons, Valerii, one of whom likewise was named Marcellus. The Westminster inscription runs in these words:—"VALERI · SUPERVENTOR · ET · MARCELLVS · PATRI · FECER." That found at Arles, in the following:—"VALERI · MARCELLVS · ET · FELICIO · PATRI · PISSIMO."

I pass on to speak of the name Amandinus. This is not by any means a usual appellation in inscriptions, and in fact I am not able to quote any other instance of it. The form of this name is clearly late, as has been pointed out by the Dean of Westminster. There is one particular which I am desirous to call attention to, and which has, I think, escaped notice hitherto, in reference to this class of Roman names. They are well-known as elongations of more usual forms, perhaps used as terms expressive of endearment, respect, or seniority. We have thus, for instance, Valentinus from Valentius, Secundinus from Secundus,—and a great variety of others. Amandinus would be elongated from Amandus, in the same way, and the name Amandus³ is

¹ The abbreviated form of this name is almost always found as VAL. It is to be noticed that it stands on this sarcophagus as VALER. I am strongly of opinion that this is itself a marked indication of a late date in the fourth century, but I am not prepared to support the opinion by proofs.

² Gruter, i. decxlvii.

³ The Rev. Padre Garucci has expressed an opinion that the name of the Amandini occurs in some Italian inscriptions of the end of the fourth century.

Inscriptions to Amandi. Two have been found at Augsburg, two at Lyons. Le Blant gives that referred to here from Spon. They have been found in England.

one very well known. The particular which appears to me to have escaped notice in inscriptions is, that the short name and its elongation occur frequently together, as belonging to parent and child respectively, or *vice versâ*; and that in fact they often, in their relation to each other, indicate a close affinity of blood. I will illustrate this by an example. A tablet, quoted by Gruter, is inscribed to Julia Valentina; here is the elongated name. The person who inscribes it to her is Julius Valentius, her son; here is the short form. I call attention to this, because whilst the name Amandinus itself has not been found by me anywhere else, I am able to point out to you an inscription in which the names both of Valerius and Amandus occur in the relation of father and son, and where at the same time, curiously enough, this relationship is indicated by a third name in its two forms, the shorter and the elongated. In this inscription the father, "VALERIUS SOLINVS," erects a memorial to his son, "SOLLIVS AMANDVS." Observe here the connecting link between "Sollius," the son's name, and "Solinus,"⁴ the father's. There can be little doubt that the names Amandus and Amandinus may be similarly related, and a daring speculator might even hazard a guess that Valerius Solinus and his son Amandus may have been kinsmen to our Valerius Amandinus himself.

So far, then, as the names Valerius and Amandinus are indicative of a period, they would suggest the fourth century. Both would be more likely to occur at that date rather than at any earlier.

I must invite you now to consider a third name, occurring in this inscription; that is, the cognomen of the son, "Superventor."

From the collocation in which this word is found on the tomb there can be no doubt that it is the name of a man and not a descriptive title or name of office. It is so very unusual and peculiar a name for a man, that it is itself evidence of a very decided kind. It carries on its face a weight of internal proof which nothing short of incontro-

⁴ The inscription is as follows :

D . M
SOLLIVS AMANDI
QVI VIXIT ANN
VII DIEB. XXX
FEXTILIA AMANDA

ET VAL SOLINVS
PARENTES PIENISSIMI

Spon, Recherches sur les antiquités de
Lyon, 65. The name of the father was
Valerius Solinus Amandus.

vertible facts should lead us to set aside. "Superventor," a word wholly unknown in classical Latinity, is a term belonging to a particular period of Roman history. It as definitely belongs to its own date, as do the distinctive fossil, or the fashion of a weapon, or the characteristic moulding of an architectural work, to theirs. In discussing the age of this monument, it is not more philosophical to attribute the name "Superventor" to the second or third century, than it would be to speak of a vertebrate fossil as derived from the Silurian or Devonian rocks, or to assign to the Elizabethan age an English inscription in India, containing the word "Sepoy." It is absolutely necessary to historical truth, to take full and clear cognizance before we draw our conclusions, of the twofold mark of lateness inseparable from this proper name. The first of these is the place held by the word in its original use in the Latin tongue. It is there employed as a military technical, and as such belongs to the latest period of Roman military science. It is entirely unknown to writers of a classical age, and even at a date so late as the wars of Constantine the Great and his immediate successors, it has not found any mention. It occurs for the first time in the works of Ammianus Marcellinus, the contemporary historian of the reign of Valens, who died A.D. 380, soon after Gratian had associated Theodosius as Emperor of the East. It was known then in the common parlance of the camp, as a term descriptive of auxiliary troops, whose position was not very unlike that of "irregular horse," attached to our Indian armies. I should like to point out that the very recent use of the word at that date in its first meaning, is quite plain from a passage in Vegetius, who flourished immediately after Amm. Marcellinus (about A.D. 385), and who, in writing on military matters, thinks it needful to enter into an explanation of the term itself, which he would not have done had it been long familiar.⁵

The other mark of lateness is the place held by the word in its secondary use on this tomb. It would seem to have been recently coined about A.D. 370, and it had

⁵ Vegetius, *De re militari*, iii. vi. "Hi ergo ab aliis separati, quod repentina incursione hostes invaderent, 'Superventores' potuerunt appellari;

sicut et 'Preventores' qui hostes præveniebant, et turbabant, vel ante ipsos locum castris opportunum præoccupabant."

crept from the language of the camp into the vernacular, and had established itself as a well-known descriptive appellation (probably in some connection with military affairs), before it could arrive at the position where we meet with it. We have it before us here as the name of a man, precisely as in our own language we have such names, in common use, as Archer, Bowman, Horsman, Spearman, Bannerman. But before this could happen,⁶ some little time must have intervened, as the popular acceptance and growth of a new word was never a rapid process, and less so then, in the absence of any public journals, than at present.

Taking into consideration, therefore, the names on this tomb, viz., Valerius, Amandinus, and Superventor, it does not appear unreasonable to say that they all point to the fourth century, and in that century to a date about the age of Ammianus Marcellinus.

We must pass on to examine now what characteristic marks of date may be discerned from the style in which the inscription runs.

These marks may be described as the following. The absence of the usual "*Diis Manibus*"—the formula commencing with "*Memoriæ*"—the use of the term "*fecerunt*"—and the terseness of the language.

M. Le Blant, the most experienced of modern writers on the inscriptions of Gaul, has some remarks in his Preface which are singularly pertinent. In characterising the earliest of all the periods of Christian epigraphy, he states that at that epoch a distinctive formula for Christian memorials had as yet no existence—that the epitaphs, drawn up according to the ancient mode, offer but a word, or one primitive symbol of the faith—or, "as it would seem, the absence of *Diis Manibus*"—to distinguish them. "They are still, so to speak, Pagan, from the mould in which they were cast."⁷ So far these characteristics exactly describe the tomb we are examining; but he goes on to say that in this earliest epoch the "*tria nomina*" are to be found, a particular in

⁶ A strong confirmation of the reasonableness of this view exists in the fact quoted by the Dean of Westminster (p. 106, *ante*), that "*Superventor*" is subscribed as a proper name among those

attached to the first Council of Orange the date of which is A.D. 411.

⁷ Le Blant, *Inss. de toute la Gaule*, Pref. xxxii.

which this inscription differs, as being of a somewhat later date.

It will be observed that M. Le Blant particularises the absence of 'Diis Manibus' as a mark of Christian epigraphy. I will mention the peculiarity attaching to this omission in this inscription, which places it beyond doubt that the absence of the two initial letters standing for these words was not accidental, but designed. The Dean of Westminster has referred already to the great number of similar formulæ to this, which exist in the Musée Lapidaire at Lyons. The whole collection of Roman Sepulchral inscriptions there, including all the varieties of form in which they are couched, is 185. Nearly one-third of the entire number, that is to say, 53, begin as the Westminster inscription, with "Memoriæ." But there is one slight, yet very important, difference. Of these 53 similar inscriptions, all except two have the initial letters D.M., one on either side, and a little word stands before "Memoriæ." This little word is the conjunction ET, which always (saving the two instances specified) commences the inscription. The ET is the grammatical link, in the sense, which joins the "Diis Manibus" to "Memoriæ." Thus no less a number than fifty-one out of fifty-three run "D.M. et memoriæ,"—*i.e.* "To the departed spirit, and the memory of ——," &c. Now it is in reality the omission of ET from the commencement before "memoriæ," which gives significance to the absence of the D.M., otherwise it might be supposed the absence of these letters was but accidental. In illustration of the importance of this, I should wish to refer to one of the two instances mentioned above, in which the same omission occurs. It is the case of a very large and important sarcophagus, of the description known as a "bisomus," and capacious enough to have contained two bodies. The inscription on this commemorates Exomnius Paternianus, a Legionary Centurion, and his daughter. There is no D.M. on this tomb, and no ET before "memoriæ," but there is nothing else in the commemorative part of the inscription to indicate that it is the memorial of Christians. On each side, however, of the commemorative words, and just under the place where the two letters D.M. would ordinarily stand, there are cut in Greek certain pious ejaculations, addressed to the departed, which leave no doubt as to the faith of the occupants. No heathens

would carve on the memorial of one whom they mourned as lately dead, such a form of parting salutation to the lost as "ΤΙΛΑΙΝΕ ΕΤΕΤΧΛ." Slight as the indication certainly is, yet the fact that this Westminster inscription is remarkable for the absence of D.M. is ground for considering that the tomb contained a Christian, and we detect that the absence of these letters is no accident, because the conjunction ET is also absent from before "memorie." In point of fact, the inscription differs from the ordinary formula of heathens in these two particulars.

The common use of the word "memorie," in commemorative inscriptions, may be said to have culminated during the reigns of Constantine the Great and his family, though it extended to a period somewhat later. There is a very significant proof of this in the Imperial coinage. There were struck during the reign of Constantine no less than ⁸ nineteen different types of commemorative coins to his deceased father Constantius Chlorus, bearing on their reverses the word "memorie." This circumstance is wholly without a parallel at any other period during the entire history of the coinage of Rome.

The phrase PATRI FECERVNT is a form very common in the fourth century, and which must not be thought in any way to signify that the brothers Valerii were stone-carvers and made the tomb with their own hands. In the Plates which accompany this paper, there are many examples of it. The inscription of A.D. 355, Plate I., is precisely similar, "PARENTES FECERVNT." In Plate II. the inscriptions 3, 4, 5, and 6 run in the same formula. All are the memorials of Christians. In fig. 3 the word which is not expressed in the others, after the verb "fecit" or "fecerunt," is supplied; and it is one which appears to refer rather to the obsequies than the sepulchre, "Appelles exitum fecit Venuste." Though "exitum" is thus employed, it appears more consonant with usage that "fecerunt" should generally be taken to refer to the memorial. The use of the term belongs to that epoch of transition, in the history of such inscriptions, when older forms were still retained, and when

⁸ See Cohen, *Const. Chl.* 78, 79, 80, 81, 82, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191. Five of these were struck by Maxentius. There

is no such reverse commemorative of Diocletian, and three only of Maximianus, the preceding emperors.

as yet those distinctive of Christian burials had not fully established themselves. As we reach the end of the fourth century, we find the mention of the day of burial, and the presence of the word "depositus," growing universal. These are coupled with the verb "fecit" sometimes, as in the inscription in De Rossi's *Inss. Christ.*, No. 372. This is upon a large sarcophagus which held the remains of a Christian maiden of eighteen, named ADEODATA. The day and year of the burial are told,

"DEPOSITA · XVI · KAL · FEB · CONS · MAGNO · MAXIMO · AVG."⁹

In the line which follows is the same form of expression which we have in the Westminster tomb, "PATER CELESTINVS FECIT." The two formulæ were, therefore, in use at the same period towards the close of the fourth century.

I have now to speak of the character in which the inscription is cut.

The letters are remarkably well shaped, their height is $2\frac{1}{4}$ inches, and they are engraved with a certain squareness in their form, which gives them an appearance of great regularity. No ligulate letters are among them, and in one case only is a letter enclosed inside another. An opinion has prevailed, I am informed, that two of the letters as used here are decisive as to the period to which the inscription must be referred. These are the two letters O and I. It has been surmised that these belong to the second century, or the early part of the third,—the O, because of its perfectly round form, it being a complete circle.—the I, because it appears in two of the words as an enlarged letter, standing higher than the rest, as it constantly does in more ancient inscriptions, of the date of Augustus, Tiberius, and others of the earlier emperors.

This is, in fact, a crucial point. Unless it can be quite clearly shown, in the most unequivocal manner, and from many examples, that a circular O and an enlarged I were in ordinary use, and that lettering of great beauty of shape was employed up to the close of the fourth century, the internal evidence of the letters of the inscription itself must

⁹ De Rossi assigns it to the year A.D. 358, in which the troops of Theodosius

the Great put an end to the usurpation and the life of M. Maximus.

compel us to assign it to an earlier age than that to which other indications seem fairly to lead.

As the sarcophagus may be said, for so many reasons, to be almost of national interest, I venture to ask attention to the setting at rest of this important point, by a somewhat elaborate chain of evidence, which appears not unworthy of being put on record in connection with the date of this tomb.

I am about to quote, as evidence which cannot be questioned, certain records having undoubted marks of well-ascertained date, in order to demonstrate that during the reigns of the whole Constantinian dynasty, and subsequently throughout those of Valentinian, Valens, and Gratian, an O, of perfectly round shape, is as frequent as one of the oval type; and again, that the enlarged I, so far from having become extinct with the second century, remains in public and in private inscriptions up to the year A.D. 400; and lastly, that we have the most adequate and impartial testimony to show that a very beautiful character was employed at, and up to, the date of the last year of Theodosius the Great, *i.e.*, A.D. 395.

The Imperial coinage of Constantine the Great and his sons exhibits a very perfect lettering, and which in the best examples has a certain squareness of form approaching very closely to that which marks this inscription. Throughout this series of coins, extending in his own case to the extraordinary number of over 600 varieties of type, and in the cases of Fausta and his sons to close upon 800 varieties more, the perfectly round O appears everywhere in the Imperial mints; and if some rare instances should be found which seem to differ, they will readily be seen to have been issued as semi-barbarous pieces, and not from the well-established mints of the empire. For dates subsequent to this epoch,¹ between the years A.D. 360 and A.D. 385, the coins of Valentinian, Valens, and Gratian, will show, from the examples before us, that an O of perfectly round form was commonly used in the mints of Treves, Lyons, Arles, and Aquileia. The mint² of Constantinople, which was the

¹ A considerable number of the coins found in the Forum at Silchester were exhibited when this paper was read. As the fourth century advances, the form of the O is altered on some examples to

an oval, but on others it remains, as in the age of the Constantines, a complete circle.

² The similarity in shape between the letters (O included) on the gold medallion

principal source of Imperial money in the world, continued to coin with a perfectly round O, in the well-known exergue "CONOB," up to an advanced date in the fifth century.

In the case of the enlarged I, which occurs twice in the short inscription on this sarcophagus, it is not possible to call in the evidence of the coinage, because this letter is not used in its enlarged form on coins. It is, however, in my power to supply a most complete chain of actual inscriptions, every one of which is dated, and which will be found to extend throughout the entire length of the fourth century.

For the beginning of the century we will take the reign of Constantine the Great. Here are three inscriptions in his honor, selected purposely from three different periods of his life. One, whilst he was yet only a Cæsar, before he had become emperor, date about A.D. 304. A second, after he had crushed Maxentius, date about A.D. 312. A third, subsequent to his having conferred the dignity of Cæsar on Crispus and Constantinus, date between A.D. 317 and A.D. 320.

Date, about A.D. 304.

PHSIMO · AC · FORT^ISSIMO
FVNDATOR^I · PACIS
AC · PVBLICAE
LIBERTATIS
AVCTORI
D · N · FLAVIO · VAL
CONSTANTINO
NOBILLISSIMO · CAES³

Date, about A.D. 312.

·IMP· CAES· FL· CONSTANTINO· MAXIMO· TRIUMFATORI
PIO · FEL · AVG · P · P
OB · RES · BENE · ARMIS · CONSILI^ISQ · GESTAS · ET · REMPVBL
PACATAM
S · P · Q · R⁴

of Honorius (Rev. Gloria Romanorum), date about A.D. 400, in the Blacas collection, and those sculptured on the sarcophagus, is very remarkable. This medal-

lion is engraved in Cohen, vol. vi. Pl. xvii. 2.

³ Gruter, I. cclxxxii.

⁴ Gruter, *ibid.*

Date, A.D. 317 to 320.

***** SACRO. DD. NN. CONSTANTINI. MAXIM**I**. VENERANDISSIMORVMQVE . CAESARVM
 ***** VVLGEIANAE. CIVITATIS. ACILIO. SEVERO. ET. VETTIO. RVFINO. CONS. PETVRCI * * *
 *** PAGO ***** ANA. M. D. CCCXC**I**. K. VELLIANA. M. XVII**I** FF. *** VANVS. M. XLV. F. MYSCINIANVS. M.

In the lists of names which follow here, the enlarged I occurs fourteen times. ⁵

For the middle of the fourth century we will take a date historically certain, by its being in the interval between Nov. 6th, A.D. 355, when Constantius II. created Julian a Cæsar, and the assumption of the purple by the latter in A.D. 361.

REPARATORES. ORBIS. ADQVE. VRBIVM. RESTITVTORES. D. D
 N. N. FL. IVL. CONSTANTIVS. P. F. SEMPER. AVG. ET. IVLIANVS
 NOBILISSIMVS. AC. VICTORIOSISSIMVS. CAES. AD. AETERNAM
 DIVIN**I**. NOMINIS. PROPAGATIONEM. THERMAS. SPOLETINIS
 IN PRAETERITVM. IGNE. CONSVMPHAS. SVA. LARGITATE
 RES TITVERVNT ⁶

Of the same period are many examples of private inscriptions, *e. g.* the following epitaph, which is dated July 22nd, A.D. 358.

✠ EXSVPERIA ⁂ CONIVX ⁂ CAST**ISS**IMA
 MIHI ⁂ QVE ⁂ VIXIT
 ANNOS ⁂ XXXIII ⁂ DEPOSITA ⁂ XI ⁂ KAL ⁂ AVG
 DATIANO ⁂ ET ⁂ CEREALE ⁂ CONSS
 IN ⁂ PACE ⁷

The public inscriptions of the reign of Valentinian I. supply several instances which belong to A.D. 370 to 375.

Date, about A.D. 370.

PISSIMO
 FELICISSIMOQ
 PRIN**CI**
 VAL**ENTINIANO**
 INVICTISSIMO
 SEMPER . AVG ⁸

⁵ Gruter, l. ccix. 2.

⁶ Gruter, l. clxxix. 2.

⁷ De Rossi, *Inscr. Christ.*, 134. See also that to Pelagrinus, No. 144, date 19 Dec. A.D. 350. Both of these have the

triangular stops between the words, similar in character to those upon the Westminster tomb; also see the stops, No. 241, date A.D. 368.

⁸ Gruter, l. cclxxxv. 7.

Date, A.D. 370—375.

EX TINC TORI . TYRANNORVM
AC . PVBLICAE . SECVRI TATI
AVC TORI

D. N. VALENTINIANO
PERPETVO . AC . FELICI
SEMPER . AVGVSTO

CEIONIVS. RVFIVS. ALBINVS. V. C
PRAEF . VRBI . ITERVM
VICE . SACRA . IVDICANS
D . N . MQ EIVS⁹

We have now arrived at the period as to which I am desirous no doubt should be left, the age of Gratian and Theodosius. On the 19th January, A.D. 379, Gratian invested Theodosius with imperial rank. Gratian was killed Aug. 25th, A.D. 383.

Date, A.D. 380—383.

D. D. D. N. N. N. IMP. CAES. GRA TIANVS. VALEN TINIANVS. ET. THEODOSI VS
PII . FELICES . SEMPER . AVGGG.

HYNC. ARCV. M. AD CONCLVDENDVM. OPVS. OMNE. PORTIC. MAXIMAR. AETERNI
NOMINIS. SVI. PECVNIA. PROPRIA. FIERI. LOR. NARIQ. IVSSERVNT¹

The foregoing was inscribed at the commencement of the reign of Theodosius, the following at its end. When this was carved he had associated his two sons in the Empire.

Date, A.D. 395.

IMPPP. CLEMENTISS. FELICISS. TOTO. ORBE . VICTORIB
ARCADI O . HONORI O . ET . THEODOSI O . AVGGG .
&c. &c. &c. &c.
S. P. Q. R.²

The enlarged I has now been followed through every part of the fourth century, and I only abstain from accumulating additional proofs, because those now adduced are ample for the satisfaction of any fair and reasonable mind. There is however one more inscription of the reign of Theodosius

⁹ Gruter, *ibid.*, 6.¹ Gruter, I. clxxii. 1.² Gruter, I. cclxxxvii. 1.

which has so important a bearing upon the lettering of the sarcophagus that I am led to quote it. The name of Cæcina Decius Albinus, the præfectus urbis, is known from other inscriptions, and is mentioned also by Macrobius. He appears to have dedicated some sculpture in commemoration of the safety of the Emperors, and to have subsequently added to it. Here is the inscribed record.

Date, A.D. 395.
 SALVIS · DD · NN.
 HONORIO. ET. THEODOSIO
 PP · FF · SEMPER · AVGG
 CAECINA · DECIVS
 ACINATIVS · ALBINVS
 V · C · PRAEF · VRBIS
 FACTO. A. SE. AD IECIT
 ORNAVIT³

This inscription was found upon a very large marble pedestal. There are three particulars relating to it which render its evidence most valuable. First, it exhibits the enlarged I as you would have found that letter in the Augustan age. Secondly, it has all the terseness of the most classical period of the language. Lastly, and what is of more pertinence than either of the other particulars, the shape of the lettering is so extremely beautiful, that even Gruter, whose experience of the forms of Roman letters of all periods may be said to have exceeded that of any other person whatever, was so struck by the character in this instance that he departed from the absolute taciturnity of his ordinary habit, and has gone so far as to place on record along with this inscription his sense of its unusual excellence. He has appended this note of his admiration, "*Basis marmorea grandissima et litera pulcherrima.*"

This is the strongest proof we can possess, because it is the evidence of a perfectly impartial, as well as a perfectly capable witness, to show that in the reign of Theodosius, at the very end of the fourth century, not only were the peculiarities of certain letters adhered to, but that the character of the lettering at large would bear comparison (at least in good examples) with that of a classical age.

³ Gruter, I. cclxxxvi. 7.

Only that I may not appear to have overlooked it, I touch upon the shield-shaped ornament in each of the panels enclosing the centre. It can yield no evidence of date worth considering. In the case of the sarcophagus at Autun, which has the same ornament, and almost in the same position, there is upon the cover a late type of the sacred monogram—a dove and a small cross—all of them indicative of later work than that now before us. On the other hand, you have an interesting example of the use of the same pelta-like ornament for a centre in an illustration accompanying this paper, of much more ancient date, from the Catacombs, where it is depicted covering the sepulchre of Urbica (Plate II. fig. 2).

I have now examined the internal evidence as to date which may be extracted from the sarcophagus itself, by a scrutiny into the names, the style, and the lettering of the inscription. An enquiry remains now into what appears to me to be of even still deeper interest, namely, the sculpture in relief upon the lid.

The lid of this sarcophagus is in a very different state to the tomb itself. It has not only sustained excessive violence in forcing open the coffin, when it was broken into several pieces (though a slab of great thickness), but besides this, it has all the appearance of having at some time lain level, or nearly level, with a floor, perhaps slightly raised above it, but exposed to the action of weather and the tread of feet, whilst the sarcophagus beneath was safely buried and remained uninjured. Mr. Poole, the Abbey mason, has expressed his opinion that it is formed of the same oolite as the coffin. He says, "it is of a material similar in quality with the slight difference found in adjacent strata or blocks of the same kind of stone."

I have examined with much care the execution of the ends and back of the coffin, and making allowance for the corrosion of the surface of the lid from exposure, it does not appear that the workmanship of the back, the ends, and the cover, can be said to differ much, if at all. It has been assumed hitherto almost without hesitation, that the cover, though of the same stone and apparently from the same quarry, is of a very different date, and to account for this it has been surmised that it is the original slab, but re-cut at a later period. There is one circumstance only which can

give the least ground for such an opinion. I will state what this is, and an explanation of it.

The foot of the coffin, at both its sides, is shaped away in a slight bevel, and no sculpture is worked upon this portion. The design of the paneled front being symmetrical, and placed so as to fit exactly the space from the head to this bevel, it is clear that the beveled part of the tomb was intended to slide in out of sight behind a jamb or pilaster, leaving when it was *in situ* the whole of the wrought front exposed to the eye.

The lid is also narrowed at its foot, to correspond with the bevelled portion of the tomb, but whereas there is no sculpture upon the coffin on that part meant to be hidden behind some projection, the cross upon the lid reaches the whole length of the slab. The foot of the cross fills that part corresponding to the bevel.

This circumstance may seem to imply at first a want of perfect correspondence between the sarcophagus and cover, but there is a perfectly simple explanation for it. The back and ends indicate that they were placed originally so as to be little seen, the coffin apparently being intended to stand above or upon the floor and against a wall. If you imagine it in such a position, with its beveled end hidden behind a jamb (some five or six inches only), and conceive yourself standing over it, you will at once perceive that if the spectator was close to the tomb he would have the whole of the cover exposed to his eye. Any person near the head would see quite behind the jamb or pilaster at the foot.⁴ It seems reasonable therefore to suppose that the sculpture on the cover extended to the end, because it would be visible, whilst that on the coffin stopped short at the bevel because it would be hidden.

I must now ask you to consider the cross which is in relief upon this lid. A very careful representation of it, accurately drawn to scale, will be found in Plate III. A most exact drawing of the foot, executed at the largest scale which the pages of the journal will admit, will be found also in the same place.

The cross before you is evidently an unusual one. Its head is formed of three nearly equal limbs, each of which has the shape of a wedge, expanding from the centre out-

⁴ It may have stood within a *loculus* or low niche.

ward. So peculiar is this wedge-like form that the central limb will be found to expand from a dimension of 4 inches where it leaves the shaft to 12 inches at its extremity (*i. e.* three times its original width); the expansion of the side limbs not being quite so great. At their outer termination the three limbs of the head of the cross appear as if cut off abruptly, having a truncated character. The fourth limb or shaft of the cross appears disproportionately long, and it is of the same width throughout.

This very peculiar cross, though one not familiar to our eyes, is yet well known, especially to numismatists. It will be most readily recognized, and will be found to have an epoch of its own, marked by most definite limits, in which it was the universally accepted symbol of the Christian faith. But its period is one long anterior to the age hitherto assigned to this sculpture, and as this form of cross has as yet scarcely come within the range of modern archæology, I propose to speak of it in contradistinction to other and better known forms of the same emblem, under the distinctive name of the "wedge-limbed"⁵ cross.

The wedge-limbed cross of this lid is however not the only symbol here. It is combined with another, and that too one of the very earliest employed by Christians in the sepulture of their dead. The termination of the shaft of the cross is most singular, and does not appear hitherto to have been satisfactorily accounted for on any hypothesis put forward. It has been called a "floreated foot." It has been assigned to the tenth, eleventh, and twelfth centuries, as though it were possible that, under any circumstances, an ending, if floral, so flamboyant, could have been combined with a cross-head whose ends are so abruptly terminated, or as if it were conceivable that one limb, and that one the fourth (which at the base would be likely rather to terminate in steps), could have been curled into foliage by mediæval workers, without the faintest hint of a curve or of any other shape but the most rigid and inflexible, elsewhere upon this lid. Such a supposition, it must be admitted, is in the last degree inconsistent in itself. Proofs will now be adduced to show that this singular foot is also a perfectly well-known symbol, and that the place it occupies here in combination

⁵ I prefer this Anglo-Saxon epithet to the word "cuneiform," not only because it is more simple and forcible, but also

because "cuneiform" has become so completely a technical of Assyrian archæology.

with that very peculiar⁶ cross in whose company it is found, is not only capable of easy solution, but is perfectly in keeping with the received customs of Roman burial, and that moreover instead of forcing us to grope in the middle ages for some clue to an unaccountable paradox, it will demand rather that we consent to give this double emblem of faith in Christ a place as far back in the fourth century as a strict adherence to archæological truth will admit.

I return to the wedge-limbed cross. I propose to exhibit to you evidence of the process, step by step, under which this form of our Christian symbol arrived at its peculiar and characteristic shape. It is the first, the very first, conception under which that which is now designated as the "Latin cross" became accepted in the western world.

The sepulchral slab of the Boy Marcianus, of which Plate I. has a representation,⁷ bears upon it the date of his burial, Nov. 30th, A.D. 355. Upon this slab is sculptured a child holding in his right hand a cross taller than his own stature. The cross he holds has the general character of a Latin cross, save that its limbs are wedge-shaped, and that the Greek P, as a symbolic letter, forms its shaft.

The date of the Boy Marcianus's burial was twenty-four days after Julian (not as yet "the Apostate") had been raised to the rank of Cæsar by his cousin Constantius II. The representation of the cross beneath which the boy stands, compared with the contemporary coinage of the Empire, will furnish curious and significant proof as to where

⁶ Since this paper was read, my attention has been directed to two somewhat similar instances of crosses on sepulchral stones. One of these is that of which a drawing, furnished by the Venb. the Archdeacon of Stow to Mr. Albert Way, has been engraved in this journal (*ante*, p. 126), the other was found last year in Normandy. Of these, the first-named is certainly much later, the arms are not strictly wedge-shaped at all, the limbs of the cross are elongated and are scooped or hollowed in their outline until the cross assumes very nearly the form of a "cross-patee," the foot also stands upon a stilted semi-circular arch of comparatively late character, whilst two other smaller crosses of similar type are on either side. These are incidents clearly suggestive of later date. In the second instance, the cross on the Norman slab approaches more nearly the true wedge-like shape; the arms

are (apparently) less scooped in outline, but at the middle of the shaft there is a short plain bar, forming with the stem a Latin cross of the present recognised type, beneath the wedge-shaped head, and which Latin cross is entirely without a trace of expansion in the limbs. The foot is wholly wanting. This example from its wedge-shaped head appears of earlier date than the former, but the presence of the Latin cross without expanding arms is a strong indication that even this is much later than the Westminster tomb, and in all probability belongs (as has been surmised by Padre Garucci) to a period when the cross had been long borne as a processional ornament, and from the handle on the staff of which the bar forming the Latin cross on the Norman stone was perhaps derived.

⁷ This may be found in De Rossi's work, and also in that of Mamachi.

this symbol, thus beginning to be recognized, had come from. The cross which overtops the boy's head is one of the forms of that monogram or cipher of the name of Christ which had been adopted for the banner of the Imperial power. It is from the very singular fact that it was a monogram, made up of two well-known Greek letters, the X and the P, that it derives its peculiar wedge-like limbs. This monogram, the Chi Rho, since the defeat of Maxentius by the father of the reigning Emperor, was associated in the minds of all men with triumph. It was borne, as is well known, at the head of the Roman armies. It appears on the coinage of Constantine the Great (though not prominently), placed upon his own helmet, and upon the standard guarded by his legionaries. But a few years before the Boy Marcianus was born this monogram had already assumed on the coinage a much more important prominence. The ancient and long-recognized reverses of the Roman money were disused. On one type of the common bronze currency of Constans, Constantius II., and Magnentius, almost the entire field of the reverse was filled now by the mystic letters placed between the Greek *alpha* and the *omega*, in allusion to the well-known passage which describes Christ as the beginning and the end. Specimens of this reverse are engraved on Plate I. from coins struck between A.D. 345 and A.D. 350, and which have been found recently in the Forum at Silchester. If the large and conspicuous cipher upon these is compared with the cross in the hand of Marcianus, the connection will be evident. It is but another form of the same monogram; and it is found in the identical shape in which the boy holds it upon the "Two Victories" type of the coins of Magnentius, where it surmounts the inscribed oval supported by the winged females.

The cross upon the memorial of Marcianus is the earliest I am acquainted with upon a sepulchral stone. We cannot doubt that this wedge-limbed symbol was then the one popularly accepted, and it is clear where the wedge-like form of its limbs was derived from. I would take now another step in following this cross. It is not merely in this example of a memorial tablet of the year A.D. 355, but in every other representation you can find of this period that you will trace invariably the same expanding limbs. It is, in a word, the characteristic of the earliest Latin cross, a

peculiar feature derived directly from the Greek letters of the sacred monogram, and adopted rapidly and universally throughout the West as the received representation of the emblem of redemption, because of the supreme dignity of the place given to it upon the great Imperial standard of Rome. I am not aware that this striking fact has ever been pointed out before to which I call attention now, namely, that the cross which first found universal acceptance with the western world was not the representation of the patibulum or tree on which the Redeemer suffered, but was (according to the habit of that age) an allusive emblem, derived under the form of a cipher from the greatest symbol of temporal authority ever known on earth—the labarum of Constantine the Great.

To pursue this emblem and trace it from the memorial of Marcianus, and the coins of Constantius II., until we can identify it in the very shape it bears upon the tomb of Valerius Amandinus at Westminster, must be our next proceeding.

The wedge-limbed cross, without the loop of the Greek P, that is to say, a cross having a head of three equal expanding limbs, and a shaft of longer but also of expanding shape, is first found on the coinage of Rome, so far as I am at present aware, in the reign of the Emperor Gratian. It may be placed at A.D. 383. It is to be observed that this form is intermediate between that on the memorial of Marcianus and this sarcophagus. It is identical with that on the tablet of A.D. 355 in every particular but the absent loop of the P. It is also identical with that on the sarcophagus, with the exception of its fourth limb. The shaft is wedge-shaped on the coins of A.D. 383, whereas it is of equal width throughout on the sarcophagus. The processes of this alteration can be traced at every step in the coinage of Rome.

When the wedge-limbed cross appears on the coins of Gratian, it is found there under circumstances of most curious and peculiar interest. During the reigns of Constans and Constantius II., about A.D. 350, a striking reverse was coined to symbolise the adoption of the Christian faith by the Empire. This reverse is represented on Plate I., from a coin of Constans.^a It depicts the Galley of the Empire, steered

^a This, and the coin of Constantius next to it, were also found in the Forum at Silchester.

by Victory. Upon the deck stands the Emperor, fully armed for battle. On the palm of his right hand he holds the ancient emblem of Roman triumph, the winged Victory, who raises up her wreath to crown his helmeted head. With his left hand he bears aloft the labarum, and on it the mystic monogram of Christ. Constantius II. struck a coin almost identical with this, yet having one point of difference, which denotes the growing influence of Christian ideas. A comparison of the two reverses, as placed side by side in the accompanying Plate, will make the nature of the alteration clear. The galley is the same, the Victory sits at the helm as before. The Emperor, in arms, bears the labarum on the deck. The legend around the edge is identical, "*FEL. TEMP. REPARATIO*," but the winged Victory of the ancient Mistress of the World is gone from the Imperial right hand, and in its place stands now the symbolic phoenix, with rayed head, the significant emblem of a belief in the resurrection of the dead.

From this reverse of Constantius II. we step at once to the introduction of the cross. It is necessary again to refer to Plate I., where the third coin of the second line represents the type in question. The identity of this coin with the two preceding is quite evident. The galley, the Victory at the helm, the armed Emperor on the deck, occupy precisely the old places; yet there is a still further departure here from the first type of the reverse. It will be observed that the Emperor, though armed, bears no weapon, nor does he hold the labarum, nor any sceptre, or symbol of power. Standing on the deck he holds aloft his right hand, whilst he stretches his left towards the figure who steers; but his head is turned to regard a wedge-limbed cross,⁹ which appears high up on the field, above his left shoulder. This change in the attitude of the Emperor denotes once more the still increasing influence of Christianity. The position in which he is placed would at that time have been instantly recognised. He lifts his naked right hand towards heaven in the well-known attitude of Christian prayer, so frequent in the catacombs, and he points with his left to the Victory at the helm as the object of his petitions. The change in

⁹ It is not unlikely that this may have been struck after the rebellion of Maximus had broken out, and that it covers an

allusion to the cross seen by Constantine in the sky before he encountered Maxentius: see Euseb. v.; Cons. i. 28, 29.

the attitude of the Emperor's head implies that he has fixed his regard on the cross as his hope, and that he looks to that for success. We have now distinctly traced the links by which the monogram upon the imperial labarum makes way for the symbol of the cross itself, whilst we see that the symbol retains the immediate memory of the monogram in its wedge-shaped limbs.

We have thus the actual Latin cross distinctly adopted as the recognised symbol of the faith, and disengaged from the allusive form of the "Chi Rho." As we see it in this, its first appearance in a conspicuous position, all the four members are expanded, adhering as closely to the type of the Greek X as the cross held by Marcianus. But at this date we meet with an alteration, and that alteration rapidly became the most marked feature in the emblem, and is perpetuated in a great variety of ways throughout the century which ensues.

As the fourth century draws to a close, the fourth limb of the cross ceases to have a wedge-like shape, and begins to assume the character of a straight shaft; advisedly a shaft,—not yet a processional staff. In the fifth century, as we shall see, the shaft itself was still further elongated and drawn out until it became a veritable staff, clearly used in processional pomps, and occupying, as it would seem, the place of the imperial standard in the imperial hand. We must again observe at this point that the change which the cross undergoes in the fourth member does not seem to have been made in order that it might assimilate more nearly in shape to the actual cross on which the Saviour suffered, but solely because it supplants the labarum, and was borne in processions. This is evident from the fact that the three remaining limbs continue to adhere throughout the fifth century most closely to the expanding shape of the limbs of the letter "Chi." The head of the wedge-limbed cross always appears as being disproportionately small.

I shall very briefly follow this important change in the shaft of the cross, through the coinage; and it will bring us, so to speak, face to face with the cross of the sarcophagus.

The Boy Marcianus, in the tablet of A.D. 355, holding in his right hand a cross taller than himself, is certainly sug-



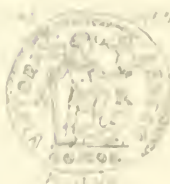
Dated NOV 30 AD 355

MIRAE INNOCENTIAE AC SAPIENTIAE
PVIPPO MARCIANO QV VINT ANN III ET
MENSES III DIES II QUIESCET IN PACE
FORDVAT TSC ATBETIONE ET LCLIMANO COSS PARENTES FECERVNT



From the collection of the British Museum

COINS AD 350 to 450



gestive that even as far back as that date¹ a cross of large size was held or borne in some of the ceremonies of the Christian Church.²

A comparison of the figure of Marcianus, at the top of Plate I., with the coin of the Empress Galla Placidia in the third line directly under it, strongly favours the idea that the attitude thus portrayed with regard to the cross must have been one which was at that date very familiarly known. The exact period when this coin was struck is difficult to fix. She received the imperial title in A.D. 421, but it is probable her coins are somewhat later. The winged Victory of ancient Rome is here associated with the wedge-limbed Latin cross, and holds it as a processional ornament. This Latin cross has the fourth member represented as a straight shaft. A period of some seventy years had elapsed when this was struck, from the date of the memorial of Marcianus. The influence of Christianity was now paramount. The cross sculptured on the lid of the sarcophagus, if compared with that on this coin, will be found to be the same. Its identity in shape is an archæological fact, which it is not possible to question.

A series consisting of five later examples is supplied in the two lowest lines of Plate I., for the purpose of making it clear that the cross on the sarcophagus must be assigned an early place among the varieties³ of this symbol having wedge-like members. These examples commence with the reign of Valentinian III., about A.D. 440, and end with Anthemius in A.D. 470. We trace in these coins the change which this cross had undergone by the middle of the fifth century. That which is depicted on them is a processional cross, evidently constructed to be borne in the hand. The somewhat wide and straight shaft of the older shape, which

¹ This seems all the more likely, because the boy, being only a little over four years old at his decease, cannot be portrayed here as doing an act which he personally had been accustomed to perform. His engraved portraiture therefore in reality represents a custom.

² A few fragmentary words from an inscription supplied by De Rossi, the date of which belongs to the consulship of Stilicho, and therefore falls within a year or two of A.D. 400, commemorates one who was apparently a cross-bearer in the processions:—

(*locus* Joan NIS • STAVROFORIS . . .
 IN • PACE • FORTVNA • QVI • VIXIT .
 KAL • OCTOBRIIS • STILICHONE V C CONS)

³ In the wedge shape proper, the arms of the head are very short compared with their width, and they expand rapidly, so much so, that in the Westminster tomb the wide end of the wedge is three times the width of the narrow; the outline of the wedge-shaped arm is not scooped or hollowed, but rigid and straight. By the middle of the fifth century the arms were much more hollowed.

most closely resembles that of the sarcophagus, has become now a long and slender staff, and it is surmounted by a head which looks out of proportion, as if too small for the length of its support. The coinage of this age testifies in a most remarkable way the universal adoption and supreme importance to which this wedge-limbed Latin cross had now attained in the State ceremonial. The grandson of the great Theodosius, Valentinian III., bears it instead of the ancient sceptre of his predecessors upon his shoulder, as depicted in the imperial portrait. The Empress Eudoxia, seated on the throne in full majesty, and crowned with the jeweled diadem, has resting on her left arm, as she sits, a stately cross of this peculiar shape, remarkable for the length of its staff. In her right hand is seen an orb surmounted by the more ancient cross with four expanding limbs, as displayed first on the coins of Gratian. Petronius Maximus, and also Avitus, are portrayed upon their coins fully armed for battle, like the ancient emperors, but instead of grasping with the right hand the standard of the legions, as these would have been represented, they hold in the place of the labarum the same cross, with long and slender staff, and with a small wedge-limbed head. Petronius stays himself upon it, whilst he crushes beneath his heel a serpent with a human face. In the last of this series, Anthemius and Leo, with their right hands, conjointly support the same cross, which placed at the centre forms the principal object of the group, and rises above their heads, having apparently a jeweled stem. Although changes appear soon after this in the shape of the three members which compose the head, still the wedge-limbed cross with its expanding and abruptly-terminated arms, maintained a conspicuous place for many ages. In the mosaics of the sixth century it is frequent. It stands at the back of the mystic lamb upon the altar in the Church of SS. Cosmas and Damian at Rome (date A.D. 530). It appears between the alpha and omega in the central medallions, supported by the flying angels, in St. Vitale at Ravenna (date A.D. 547). In the same shape as we have seen it last upon the Imperial money it is represented in the Church of St. Laurentius in Verano, Rome. In this mosaic, borne as a processional ornament it appears in the left hand of the Saviour, and in that of St. Peter, and also of St. Laurentius. Thus, in truth, in this peculiar

form of the cross, faint echoes of the original monogram of the sacred name, the unconscious traditions of the Greek Chi of the great banner from whence it derived its origin, continued to be repeated from age to age through the long vistas of Christian art.

The most important and, in my opinion, the most interesting part of the explanation of the sculpture on the lid of this sarcophagus is still to be added. I mean the identification of the peculiar foot which forms the termination of the shaft of the cross.

Students of Christian archæology are aware that the earliest figures by which our fathers in the faith sought to record their belief were entirely allusive and emblematic. They avoided direct representation of anything which might betray the truths in which they trusted. By common consent of all who have given study to the subject, it is admitted that the fish and the anchor are the earliest Christian emblems we are acquainted with. The two are continually together upon the older slabs and sarcophagi. Of these the anchor was especially dear to the hearts of believers. It expressed on the memorials of their dead the hope of reunion; it symbolized, to the baptized, fortitude under the pains of persecution or martyrdom; it spoke always of stability, amid the waves of this troublesome world. Where the Christian dead were, the anchor also was; and it preceded by a long interval any representation of the cross. By degrees allusions to the cross, but not the cross itself, rather the several forms of the sacred monogram, began to appear on memorials. The two emblems speedily coalesced, the expanding ends of the wedge-limbed cross are seen occupying the place of the bar of the anchor. One symbol conveys now to the initiated all the treasured associations which belong to both emblems. Several illustrations are before you, in Plate II., of these touching expressions of belief in Christ, and in the greater number of them the symbol itself is the only part of the inscription which declares the Christianity of the departed, a fact which renders them peculiarly fitted to illustrate the tomb we are interested in.

The anchor of early Christian archæology is a figure which can scarcely be mistaken for any other when once well known. But it must not be supposed that the ancient

Roman anchor is identical in shape with that now used. In the collections of inscriptions published with such praiseworthy diligence during the seventeenth and eighteenth centuries, an anchor is frequently represented in the letter-press, and almost always with the barbed fluke of modern times. It can but mislead to rely on this figure as any guide. There are now abundant representations which are more exact, and the anchor of the loculi of the catacombs is reproduced with the utmost fidelity in the works of De Rossi, and of others. The examples engraved, both in Plate II. and Plate III., will supply a sufficient representation of it. Its form ⁴ may be perfectly gathered from here. At each end of its stem or shaft this anchor has a knob of rounded shape, which at the upper part certainly stands for a large ring, and perhaps also at the lower. The shaft at the bottom spreads out into two wide arms, which take generally a somewhat flattened curve, leaving the knob at the end, in the space between them. The two arms, as they spread from the shaft, depart from its straight line without making any angle or break in passing into a curve, so that they might be taken—if the rest were indistinct—for the starting of a floreated termination. These arms were often slightly re-curved, and flattened at their extremities, where the fluke would appear in a modern anchor, and this renders their assimilation to a floral shape still more possible. In the *Spicilegium* of Pitra is an article by De Rossi on monuments marked with the *ἄγκυρα*, and at the end of it is a list of those who have described engraved gems exhibiting the combination of this anchor with the cross. There are numerous instances of it, and it may be that some not within my reach may prove more striking than even that which I invite you to examine from an engraved opal, figured in the work of Martigny, and which you will find here in Plate III., fig. 4. Associated with these examples in this plate is as perfect a representation as could be obtained (allowing for its injured condition) of the whole symbol on the lid of the tomb, with a very accurate drawing to as large a scale as could be employed of the anchor foot.⁵

I have assigned the sarcophagus to the time of Theo-

⁴ See the figure from Bottari in Plate III. fig. 3.

⁵ I cannot allow this paper to appear in print without expressing the obliga-

CRUCIFORM ANCHOR

ON EARLY CHRISTIAN SEPVLCHRES

1



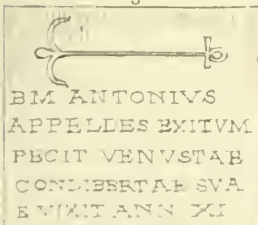
Caracombs De Ross. Pl. 2

2



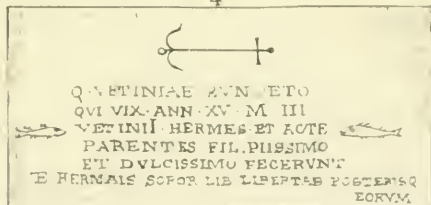
Caracombs De Ross. Pl. 2

3



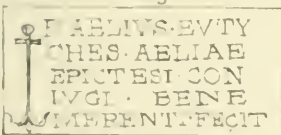
Muraleri. Pl. 2. MDCXXX

4



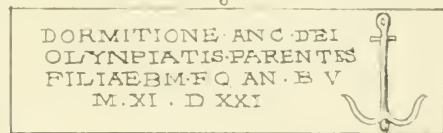
Le Piane. Ins. De Ross. Pl. 2. MDCXXX

5



Muraleri. Pl. 2. MDCXXX

6



Muraleri. Pl. 2. MDCXXX

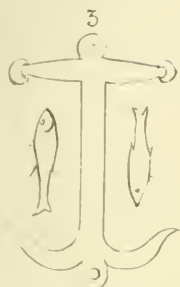
7



Grule. Pl. 2. MDCXXX

SOUTHWALL OF VAL AMANDRYN

1



ANCHOR WITHOUT CROSS
Anchor of a small boat
 Ballar III r 19



ANCHOR WITH CROSS
Anchor of a small boat
 Mar 2-22 1922

2



THE FOOT OF THE CROSS

dosius,—A.D. 380 to A.D. 400,—because “*SVPERVENTOR*” forbids it to be earlier, whilst “*FECEB*,” being without the day of burial, requires that it should not be later. The great wedge-limbed cross, with its rigid rapidly-expanding arms and straight shaft, is everywhere on the coins of the same date; the anchor symbol, so well known in its sepulchral use, is the one only consistent explanation of the foot, and, accepted, it reconciles and completes the rest. These can only meet on the same memorial at some point about the period I have named; but at that time they may, and with ample warrant. Christianity had become supreme.⁶ Sacrifices to the gods were high-treason, punishable by death. Every heathen ceremony was proscribed. Gregory Nazianzen sat at Constantinople, Basil at Cæsarea, the great Ambrose at Milan. The Emperor of the world himself submitted to open penance in a cathedral church, at the command of a Christian bishop, for an act of cruelty to his subjects.

Having thus placed before you the grounds on which the opinion was formed which I ventured, in April, to express to the Dean of Westminster, I have the hardihood now, despite the weight of adverse judgments, to submit to you a claim on behalf of this most venerable sarcophagus, that, besides the unique interest of its other associations from the place where it was for so many ages buried, it may be acknowledged to bear upon its lid an authentic and original sculpture of the fourth century,—the largest and most important in existence, as far as my experience reaches,—which displays the very ancient, but well-known union of the anchor, the symbol of hope, with the cross, the emblem of salvation. Should this mute but eloquent memorial make good its own claim,—as I have no doubt it ultimately will,—then we may congratulate our nation on possessing one early Christian monument of surpassing interest, even among the records of the great dead which are the glory of Englishmen, in Westminster Abbey.

tions under which I have been laid by the Dean of Westminster, who ordered a cast to be taken, in order to assist the production of this drawing. By this means it was made possible to place the

object in various positions beneath the light, so as to obtain the most correct representation of its relief.

⁶ Edict of Theodosius, A.D. 390.

ON A BRONZE OBJECT BEARING A RUNIC INSCRIPTION FOUND
AT GREENMOUNT, CASTLE BELLINGHAM, IRELAND.

By Major-General J. H. LEFROY, R.A., F.R.S., C.B.

THE Tumulus, in which the object to be presently described was found, is known as *Greenmount*, in the ancient Parish of Kilsaran, Barony of Ferrard, County of Louth, now united to Gernon's-town. It is a neighbourhood very early mentioned in Irish history, and rich in remains of antiquity. As Ardl Cianachta, "the hill of the tribe of Cian," it commemorated a victory, in A.D. 226, of the son of Cian over the forces of Ulster; and the Feara-Arda Cianachta, "The people of the Height of Cian," have bequeathed their name to the modern territorial designation Ferrard.¹ Within a dozen miles of the spot, to the north, is the gigantic mount of Dan-Dealgan, now Castleton, by Dundalk, which remounts, according to the Annals, to the first century of our era. About as far south is the "Cave of the grave of Boden, that is, the shepherd of Elemar," which was "broken and plundered by the Foreigners," A.D. 861, and is still so well known as the Tumulus of Dowthe.² A rath at Dromin, a mount at Drumleek, another at Moy Laighaire (Moylary), another at Dunleer, and yet another at Druncashel, on a very large scale, are still nearer. The parochial name Kilsaran, Cill-saran, Saran's church, recalls St. Saran, Abbot of Beaunchair (Bangor, County Down), whose death is recorded by the Four Masters A.D. 742. Indeed most of these spots have their place in the annals: Dromin

¹ See note p. iii. in Dr. Reeves's *Life of S. Columba* by Adamnan, and *The Origin and History of Irish Names of Places* by P. W. Joyce, LL.D., 2nd edit., 1879, p. 129.

² This remarkable tumulus, and those of Newgrange and Knowth in its immediate neighbourhood, are referred to by Dr. Petrie as examples of the sepulchral

monuments of the Tuatha De race (Round Towers, p. 103). Dr. Todd asserts without qualification that the Tuatha De, People of the Gods, were British Druids driven to the west by the advance of the Roman arms in the first century (Irish Nemus, p. xcix), a view which assigns at once a definite antiquity to these venerable and mysterious monuments.

(Druim h'Ing) was plundered by the Foreigners A.D. 834. The Irish, under Domhnall, son of Muircertach, plundered Mainister-Buith "against the Foreigners" in A.D. 968, and if the ecclesiastical establishment is meant, it must yet be certain that the rath of Moylary in the same parish, and only a mile or two distant, did not escape. The researches of Dr. W. Reeves have fixed the famous Lann Leire or Church of Austerity at Dunleer, anciently Lann Leer, the nearest country town.

The author of 'Louthiana'³ gives a view of Greenmount as it was a century ago, which still represents it fairly well. He gives also a plan of it, which shows an entrenchment all round the mount; there are still some traces of this on the north-west, but elsewhere it has disappeared. His description being very short, may be quoted in full:—

"*Greenmount* near Castle Bellingham (known also by the name of *Gernandstown*) appears to have been formerly a very strong camp, in the shape of a heart; 'tis situated on the top of a fine green hill, and overlooks all that country. The people that live near it have a tradition that here was held the first Parliament in Ireland, but there are other accounts, and not without as good foundation, that make the first meeting of an Irish Parliament in the adjacent County of Meath. There is a *Tumulus* or Barrow in this camp, which probably is the sepulchre of some eminent warrior, such being commonly found in or near most forts and camps of any consequence, and known to be a practice of the *Danes*."—Pt. I. p. 9.

The enclosure and cultivation of the ground, and the growth of trees to the south, has altered the character of the "fine green hill," which perhaps was more conspicuous when the country was more open. At present it would not be described as on the top of the hill. The actual summit is only about 150 feet above the sea, but it commands an extensive and beautiful view.

The Irish language is still understood by a few of the older peasantry in the neighbourhood, by one of whom I was told that in Irish the name was Drum-ha, but in *English* Drum-Chah; but the difficulty, to an English ear, of

³ Louthiana, or An Introduction to the Antiquities of Ireland, by Thomas Wright, London, MDCCLVIII.

catching an Irish sound is extreme, and I have been favoured, by Professor J. O'Beirne Crowe, with a note which shows the latter to be the proper designation. He says: "The place of the tumulus is in Irish *Spunmm Cātā*, in Roman letters *Druimm Catha*, and means in English "Ridge of Battle," *Dorsum Pugne*. The combination could mean also Ridge of Battles, as the irregular dependent genitive *Cātā* may be either singular or plural. The mount itself is specially called in Irish *Μοτā Dhrommā Cathā*, *Mota Dhromma Catha*, that is, the Mount of the Ridge of Battle, or Battles; in Latin, "Agger Dorsi Pugnæ, or Pagnarum." To the same effect the learned Irish scholar and topographer already quoted, Dr. W. Reeves, who says: "*Druimcha* is clearly *Spunmm Cātā*, *Dorsum Prælii*. I have a townland in Tynan parish, called Derryhaw, which I have no doubt is *Σοπε Cātā*, *Roboretum prælii*."

The Tumulus proper is about 210 feet in circumference, and 12 feet high, above the level of the ridge or dorsum to the east and south ; but on the west side, where it terminates the ridge, it is twice as high ; and on the north side there is a much greater declivity, by estimation as much as 70 feet to the present boundary. It is difficult to say confidently how much of the slope, seen from the north, is natural ; but, upon a general consideration of the features, I am disposed to think that the original level of the ground was about the top of the Passage, to be presently described. This, though not general, is to be paralleled in Danish interments. Thus, speaking of the great sepulchre of Mammen, M. Worsaae says : “ Il est en effet hors de doute que le fond du sépulchre était à 1·55 m. au-dessous du sol environnant, au lieu d'être au niveau du sol, comme c'est l'ordinaire pour les tertres du Danemark.”⁴ The ridge runs about thirty-five yards eastward, and still exhibits marks of old foundations. In fact the tradition alluded to by the author of ‘ Louthiana ’ survives among the peasantry, one of whom informed me that “ in auld ancient history ’twas a Parliament House.”

This old man, McCullagh by name, had himself taken part in an attempt to discover treasure in the mound some thirty or forty years ago ; and his testimony is important,

⁶ *Mémoires de la Société Royale des Antiquaires du Nord*, p. 230, 1869.

—that it had never been opened before ; that the passage was filled up with rough gravel containing quantities of bones, which he and his companions threw out, and that they never found any chamber. “It was the same width all the way.” Unfortunately it cannot be determined whether these were human bones. This party seems to have reached the end, and doubtless left behind them a farthing candle, which we found ; but on going early one morning to their work, full of eagerness to realise their discoveries, they found that something had given way,—the end had fallen down ; and they desisted. In fact, there has been ever since a cavity, the contents of which I estimated at from three to four cubic yards, at the summit of the mound. Although very accurately described as a *Spiumm, dorsum*, this spot cannot itself be a “ridge of battle,” being of much too limited extent, nor is there any feature of the ground in the immediate neighbourhood which would at present suggest the word. I conceive, therefore, that the term may be equivalent to Ridge of the Slain, and that very possibly the further researches that my noble relative, Lord Rathdonnell, intends to make when the season is more favourable, may bring to light other burial places under the ridge,—in fact, that it may prove to be a sort of long barrow ; but this is only conjecture.⁵

My brother, the Rev. A. C. Lefroy, interested, like myself, in the neighbourhood, some ten years ago made a second attempt, found the passage as before, and entered it, but was deterred by the same difficulty at the north end, and gave it up.

The present operations were commenced on the 18th October, 1870, by sinking down in the face of the mound, to where the south end of the passage was known to run

⁵ The adjoining demesne of Lord Rathdonnell, Drumcar, furnishes one of the innumerable instances of the great antiquity of local names in Ireland. It is *Druimm-Caradh*, the ridge of the weir, from a salmon weir formerly on the little river Nith, now called the Dee, which flows through the grounds, and it is mentioned under that name in the *Annals of Four Masters*, as early as A.D. 811. It was the site of a religious house burnt in 940. “Very striking,” says J. M. Kemble, “is the way in which the names originally given to little hills and brooks

yet survive: often unknown to the owners of estates themselves, but sacred in the memory of the surrounding peasantry or of the labourer that tills the soil. I have more than once walked, ridden, or rowed, as land and stream required, round the bounds of Anglo-Saxon estates, and have learnt with astonishment that the names recorded in my charter were those still used by the woodcutter or the shepherd of the neighbourhood.” (*More Ferales*.) Nowhere is this remark more true than in Ireland.

out. It was found, without any difficulty, about 12 feet below the starting point, and was soon cleared of the natural *talus* of soil which filled it. We found it to be 3 feet 3 inches wide, and 5 feet high, in the centre, but contracted in width at the top by a single course of stones running about 8 inches in thickness, which projected forward 15 or 16 inches



FIG. 1.

on either side, and gave support to the roofing stones. Of these there were eight, occupying, with small intervals, a distance or width of 15 feet 6 inches (fig. 3, given with the sections, *infra*). It was apparent, in the spaces between them, that there is a second layer of large stones above them, breaking joint. Finding the same difficulty as our predecessors had done at the north end, where the gravel forced in from the top filled, at the natural slope, a considerable space, we suspended operations below, and commenced sinking down from the top. This resulted in finding on the 29th October the top stone of the north end of the passage, at a depth of sixteen feet. At this stage my engagements obliged me to leave Drumear; but Mr. T. A. Hulme, a gentleman staying in the neighbourhood, entered most zealously into the inquiry, and undertook to direct the further operations. They have resulted in the singular discovery, which, however, is, I think, beyond a doubt, that this Tumulus never had a sepulchral chamber, and that the passage stops short of the central axis of the mound. The builders apparently constructed two parallel walls, five feet high, and three feet three inches apart; closed at both ends, they covered it over with large flat stones, some of them $2\frac{1}{2}$ feet to 3 feet wide, and 5 feet long, leaving, however, a space of 6 feet 6 inches at the south end open; at the south extremity of this we found a little charcoal, mixed

with unctuous clay, more, perhaps, here than anywhere else. This substance was met with in spots throughout

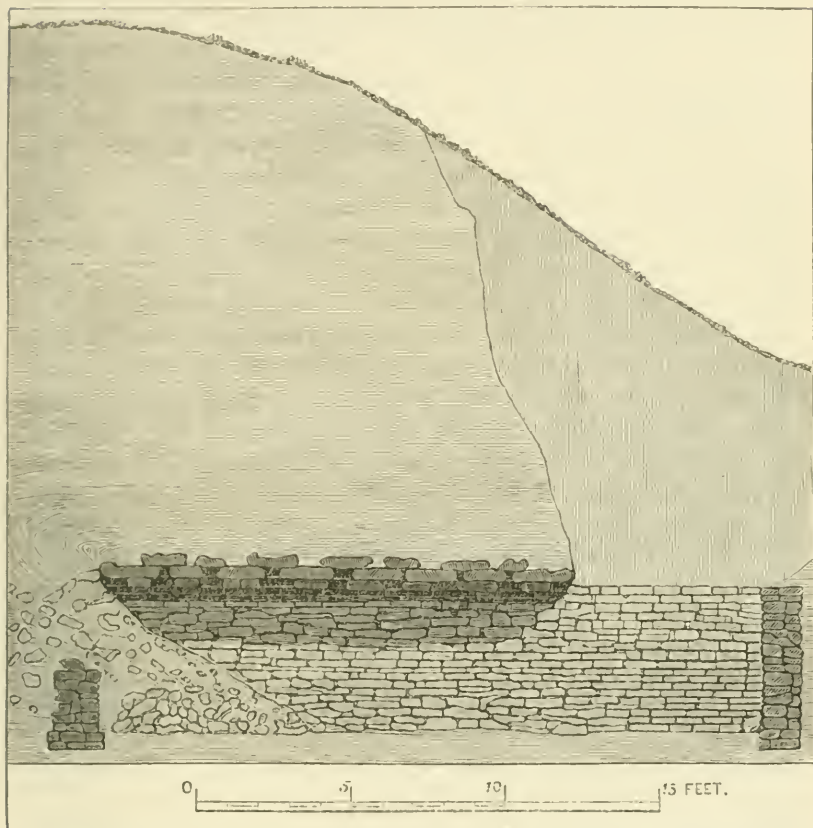


FIG. 2. Section from north to south through the Greenmount Tumulus and Long Chamber, showing the terminal walls, and the way it appears to have caved in when first cleared out 1850-1810.

the excavations, but nowhere in quantity; it was mixed here with teeth of oxen and swine. The charcoal was in a fragmentary state, and appeared to be wood charcoal. I saw no appearance of burnt bones. The spot where the walls closed, being six feet behind the entrance, as already remarked, I think had not been disturbed or reached before.

Mr. Hulme reported his proceedings in a communication, from which I make the following extract:—

“The side of the passage gave way, after you left, to some extent, so that it seemed highly dangerous to remove the

loose stones which filled up the north end. We, therefore, commenced carefully to secure the stones which formed the roof of the passage, with wooden supports, and the side walls at the north end with stout battens. That this precaution was not unnecessary, was shown by this,—that the wedges which were put in loosely one evening, were found quite tight in the morning, and bent. We came upon the end of the passage directly under the last of the eight roofing stones. The passage had been built up with loose (dry) stones, in the shape of the flag stone at the end. The stones at the top had given way and fallen into the passage, but the foundation, and about two feet of wall, were perfect, and unmistakably a continuation of the side walls, on the west almost at right angles, and rounded on the east. The wall is 3 feet 4 inches across, and 5 feet 10 inches from foundation to the roofing stone No. 8. It is 23 feet from the foundation to the top of the tumulus. We explored carefully on both sides of the end wall, but found nothing of consequence. Distinct traces of fire were found all the way down to the north-west corner of the passage. We found foundations of a building in one of the small ridges on the west; the other ridges, I apprehend, are similar."

In answer to further inquiry respecting the traces of fire, Mr. Hulme wrote:—"The burnt earth, soot flakes, bones, and burnt stones extended in a circle of about a foot in diameter, from the middle of the north side of the opening from the top, in a sloping direction to the north-west end of the passage, where there must have been, I think, a place for burning the bodies, the circular patch being the remains of a chimney. The earth is red, and, as Hearne (the labourer) says, 'like snuff.' We found flakes of soot, charcoal, and burnt stones. The burnt earth may yet be seen at the top of the opening." These evidences of the practice of cremation are highly important, and, I believe, quite new.

It was in sinking down from the top, and at nine or ten feet below it, that the workmen, on the 27th October, threw out the small bronze plate now engraved. It was not found in the passage, or at the level of the chamber (supposing there to have been one), but six or seven feet above it, and incorporated with the materials of the mound, as were

numerous bones and teeth of ox, horse, sheep, goat, and swine ; I cannot doubt, therefore, that when the mound was formed, it was lying on the surface, and was swept in unintentionally. A few days later a bronze axe (fig. 6, *infra*) was found at the surface ; it is of the type of Sir W. Wilde's fig. 247, *bipennis*, sharpened at both ends, and perfectly devoid of ornament : weapons of this type can hardly be called celts (from *celtis*, chisel), for they bear no resemblance to that implement, and are more correctly described as axes. They appear to be peculiarly Irish, for the Museum of the Royal Irish Academy contained in 1860 one hundred and thirty-two of them ; and the collection of the late Mr. Bell of Dungarvan, recently acquired by the Museum of the Royal Society of Scottish Antiquaries, contained 40 or 50, whereas they very rarely occur on the continent, and but one is figured in the 'Nordiske Oldsager.' Although generally regarded as the oldest type of celt,⁶ partly because of their simplicity and occasional resemblance of form to stone weapons, and partly because in this class only we find weapons of unalloyed copper ; there appears to me some reason to question this classification. A complete series of palstafs could be formed, passing by the gradual suppression of the side wings, the elongation of the body, and the broadening of the edge, into this type of axe, and this seems a natural progression, where the metal continued long in use, as, from its remote and insular position, almost cut off from Roman civilization, was probably the case in Ireland ; but the converse change, *diminuendo*, into the narrow, and, as a weapon, inefficient palstaf, appears highly unlikely to have occurred anywhere unless attended by a physical decline, of which we have no proof, in the race wielding them. In the present case a boy playing on the spot one Sunday morning, ten days after the discovery of the inscription, saw something which attracted his attention, in or under a sod, and kicking it out, it proved to be this axe. The evidence as to the place it came from is not quite satisfactory, owing to the difficulty in arriving at facts in such a case ; it had either been drawn up in the bucket from the bottom, towards dusk the previous working day, and escaped notice, or it had been included in one of the thick sods cut from the surface

⁶ See Kemble in *Horne Ferales*, and Wilde in *Cat.* p. 361.

at the commencement. As Mr. Hulme was present and saw the contents of every bucket sifted, the former supposition may be confidently excluded. In either case it appears, like the Scandinavian bronze plate, to have been incorporated with the mound, and to date, *as to its interment*, from the same period. The question of its antiquity will be examined below.

The only other object found, besides a considerable quantity of bones and teeth of animals, was a bone harp peg (fig. 3), resembling one engraved by Sir W. Wilde (Cat., p. 340) from the Stokes-town crannoge.



Fig. 3.

I am indebted to Mr. Franks for pointing out to me the real nature of this interesting relic, which still bears the marks of the friction of the harp string. Some visitor had also dropped on the surface an apothecary's two-dram weight, the cabalistic character on which served for a moment's amusement.

The bronze object, to be now described, is a narrow plate, 3·8 inches long, nearly 0·6 inch wide towards the ends, but narrowing to 0·5 inch in the middle, and nearly 0·5 thick ; it weighs nearly half an ounce. One end has been countersunk, for rivetting to something, and there are two rivets in it, besides a third hole, looking like a repair. The workmen described it as having some mouldy substance attached, which they threw away, doubtless the remains of a strap. The face is covered with a somewhat peculiar ornamentation of seven loops, deeply incised, with interlaced ends, as will be best understood from the wood-cut (fig. 5, *infra*), and has been inlaid with silver, mechanically attached by beating in. The same description of work is presented by many Scandinavian ornaments, and was presented by a spear-head of the third or fourth century, found near Müncheberg in 1865, which bore a Runic inscription, interpreted by Professor Stephens: *FÆXING Æ* "Uning owns me." The workmanship of this, it is said, exhibited the peculiarity that "the letters and some curious symbolic figures are formed by a species

of niello or inlaid work, by silver bar rods driven into grooves previously cut for them.”⁷ Unlike that object, it exhibits no trace of the action of fire; it has, however, lain in contact with some object of iron, the oxide of which adheres to it in spots on the back. A lump of oxide of iron, possibly the remains of an axe, but of which the form could not be distinguished, and some smaller traces of the same substance, were met with in the excavations. The ornamentation, which bears a certain family resemblance to the so-called chain-cable work on the crosses erected by GAUT, the Norwegian, in the Isle of Man,⁸ is in a ribbon of three parallel cuts or channels, about 0·02 inch wide, and nearly as deep, varied only by a chevron-like deviation from the curve on each outside line. Five spots retain the silver to an aggregate length of 0·8 inch, and there are plain traces of gilding visible on inspection under the microscope. The cuts on either side of the silver line have been filled in with a paste; from its presence in two places where the silver should be, this may possibly be only a repair. On this point Professor Abel writes:—“There is no doubt as to the existence of enamel in the channels, but it is only white enamel which contains, in the interior of the mass, bronze veins and patches, due, I consider, to sub-oxide of copper, and probably formed from the metal itself during the fusion of the enamel. Whenever the enamel is fractured or worn away, these brown veins and patches are shown. The bluish and green colorations exist only where the enamel has been entirely removed, and are most likely due to carbonate of copper,—the natural result of the exposed, partially oxidised, surfaces. Gold beaten in was distinctly visible on several parts of the bronze, on my microscopic examination of it.”

Whether, therefore, the ground of the pattern were gilded or only bronze, we have the graceful relief of bright silver and white enamel bands to form the pattern, now lifeless and colourless, exhibited on the face of this ornament.

With regard to its original purpose, I think that little hesitation would be felt in describing it as part of a sword-handle or a belt-fitting, but for the presence of Runes on the reverse side, where they would have been concealed. This

⁷ See *Journal of the Brit. Archaeol. Assoc.*, 1867, p. 385, and Stephens, p. 880.

⁸ See *Runic and other Monumental Remains of the Isle of Man*, by the Rev. J. C. Cumming, 1847, and Stephens.

is not conclusive evidence against such a use, for in the celebrated Nydam Mossfind of 1863⁹ many of the arrows were found marked with Runic characters, where the feathers would have been bound over them; the inscription is intended for identification, or possibly only for a charm, and is in characters so fine that very good eyes only could read them unassisted; it may have been so attached as to be detachable. There is no precisely similar example given among the illustrations of the Danish Bronze age in Worsaae's '*Nordiske Oldsager*' (edit. 1859), and none in the less numerous illustrations of the Iron age; but the "open-worked plate, decorated with gold or niello" (Wilde, p. 453), was a familiar Danish form of sword-handle; and we read of sword-handles inlaid with silver in the Irish annals of a late date: "The sword of Murchadh at that time (the battle of Clontarf) was inlaid with ornament, and the inlaying that was in it melted with the excessive heat of the striking, and the burning sword left his hand, tearing the fork of his fist" (Wars of G. G., p. 197). This hyperbolic description Dr. Todd paraphrases by saying: "Murchadh's sword having become red-hot, the hilt or handle, inlaid with silver, melted, and so wounded his hand that he was forced to cast the sword away" (clxxxv.). The inlaying, whether with silver or a softer metal, is the point. An object almost precisely similar, wanting only the richness of decoration, was found near Maglekilde in Seeland in 1866, and is described by Professor Stephens, whose engraving we here copy, as a small bronze slip to hang at the belt, perhaps an amulet.



FIG. 4.

This inscription, so far as decipherable, is simply the owner's name, SIUARTH, followed by some unintelligible cha-

⁹ See Engelhardt's "Denmark in the Early Iron Age," and Professor Stephens, "arrows were in plenty, both of fir and ash, variously wrought, under the corded metal, most of these weapons bear certain

marks, three parallel strokes or zigzags between two strokes, or a scoring, something like a Runic L." *Gentleman's Mag.* May, 1863, p. 633.

acters. The name OLUFR, and other equally mystical markings, occur on the other side (Stephens, p. 864).

These markings seem to give support to an opinion expressed by Mr. Albert Way, that, after all, the value of a Runic inscription in very early times, at least in some cases, resided chiefly in certain magical virtues attributed to it, not in its sense or meaning. The singularly empty character of many Runic texts, being almost unaccountable if they are regarded as inscriptions proper. (Roun = secret writing, magical character, charm.)

The reverse of our plate appears to be smooth, save for slight corrosion; it was only on applying a little white powder to clean it, that the Runic character * (H), which happens to be nearly central, caught the eye, and closer observation detected a line of twenty-four runes, very faintly inscribed, extending the whole length. "Not a single Danish inscription," said Dr. Petrie in 1845, "has ever been found in Ireland" (Round Towers, p. 222). "No Runic stones or Runic coins have ever been found in Normandy or Ireland," writes Professor Stephens twenty years later, "although this latter country had coins struck by Scandinavian princes earlier than Scandinavia itself." The ground being now broken, it is not too much to expect that many future discoveries of a similar character are in store for the students of national antiquities with whom Ireland abounds.

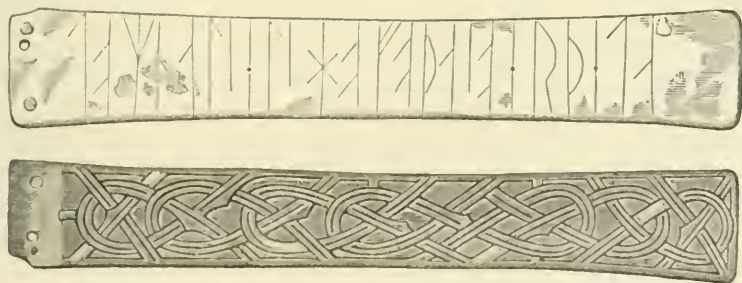


Fig. 5.

We have here twelve characters out of the nineteen which compose the later Scandinavian *Futhorc*, of which one is repeated four times, two three times, and three twice, giving great certainty as to their reading; they are of remarkable

distinctness and elegance, and present some peculiarities, which, if not to be described as rare, are exceptional, and narrow the field for comparison. The reading is in Roman letters.

DOMNALSELSHOFOTHASOERTHETA.

The penultimate τ is the same character as the initial \mathfrak{D} , those two letters having but one runic equivalent. In every copy circulated to runic scholars on the first discovery of this relic, the fourth rune was written \mathfrak{I} (1), and the three other runes now read \mathfrak{E} were also read \mathfrak{I} . It was Mr. Franks who, by calling attention to the regular recurrence of a central dot in each \mathfrak{I} , making it \mathfrak{E} , led to this latter correction. These dots are scarcely distinguishable in character from numerous other minute holes caused by corrosion in the bronze. With regard to the \mathfrak{I} for \mathfrak{N} , it was so read by every one, including the engraver in his first proofs. A query, however, of the Rev. Daniel H. Haigh (6 Dec.), "Can the first word be $\mathfrak{I} \mathfrak{I} \mathfrak{Y} \mathfrak{I} \mathfrak{I} \mathfrak{I}$? a faint side stroke might easily be overlooked," induced me to scrutinize it more narrowly, and I also borrowed for the purpose the practised eyes of my friend Professor Abel. The result is the certain establishment of the side stroke, exactly coinciding at its junction with the stem, with the spot of rust which the engraver has shown, but traceable, under sufficient magnifying power, beyond it. The rectification removes so many difficulties that it will be welcomed by every student of Irish history. *Domhnall* (Donnell) is one of the commonest regal names in the Annals; the individual and his era will be the subject of discussion below. The report of Professor Abel, which my own observation fully confirms, may be best given in his own words. "I entertain no doubt of the side stroke to the letter \mathfrak{I} . The portion nearest the vertical line is obliterated by corrosion of the metal, but a great part of the incision exists, beyond any doubt in my mind, extending at the angle indicated by you to some distance beyond the corroded surface." It is indeed possible, when its existence is known, to recognize it on a photograph, and the space between this letter and the following \mathfrak{I} requires the side stroke to explain it. The peculiarity to which, under correction of Runic scholars, I have ventured to allude, is the *concurrent* employment of the sign \mathfrak{I} for \mathfrak{A} , \mathfrak{I} for \mathfrak{O} , \mathfrak{I} for \mathfrak{N} , \mathfrak{I} for \mathfrak{S} , and

† for τ, each of these letters having other and more usual forms, viz., †, ‡, †, ‡ and † respectively. They agree exactly with the characters on the slabs numbered by Mr. Farrer 6 and 7, at Maeshowe in Orkney. Mr. Haigh has also favored me with an inscription of the eleventh century from Fenni Foss, Norway, which employs them all ; but the Maeshowe Futhorc is the only one of 16 alphabets and Futhores collected by Professor Stephens¹ which exactly coincides. The inscription, for example, on the Hunterston Runic brooch found in 1830, near Largs, fails in one point, the side strokes of the o are to the right.² The same is the case in the alphabet inscribed, apparently by an after hand, on a fly leaf of the famous Anglo-Saxon MS. called the *Ormulum*, in the Bodleian Library at Oxford. The same is the case in the inscriptions on the earlier Runic crosses in the Isle of Man, the date of which is about the commencement or certainly the first half of the tenth century,³ and which in other respects so closely resemble the Greenmount Runes. Examples of diversity might be multiplied to almost any extent. Mr. Haigh has furnished me with two inscriptions, one from Landeryd, Sweden, the other from Vasby, Sweden, both strictly contemporaneous with the one at Fenni Foss, but employing several characters differently ; and a good example of English historical interest is afforded by the inscription to a certain SYTRIK who has been identified by Professor Rafn with the Danish chieftain SYDROC or SIDRIC (remark the interchange of τ and d), who was slain in a battle near Reading towards the end of the ninth century. In this four letters out of our ten have a different form, namely, o, τ, s, and m ; the x occurs in this inscription in both forms. See *Inscrip. Runique de Slesvig Mérid.* par C. C. Rafn, 1861. The inscription found in 1852 in St. Paul's churchyard⁴ has the same o, but a different A, s, and τ. I conceive that the evidence of the writing points therefore to

¹ Old Northern Runic Monuments, 1866., p. 99, *et seq.*

² See Frontispiece to Dr. D. Wilson's Prehistoric Antiquities of Scotland, and Stephens, p. 591.

³ The Norwegian occupation of this Island dates from A.D. 885. Dr. Cumming remarks, "Although Professor Munch has conjectured some of the Runic crosses to be of the ninth century, I hardly

feel disposed to allow them an earlier date than the middle of the tenth century, or about the reign of Guthred, the founder of Castle Rushen, at which time we find from the Chronicles of Rushen, Rolwer, or Rolf (an evident Norwegian), Bishop of the Isle." Cumming, p. 4, and see Munch's Chronicle on Mannie.

⁴ Figured in Archaeol. Journ. vol. x. p. 82.

some probable connection with the authors of the Maeshowe inscriptions.

There is no substantial difference between the interpretations of the inscription arrived at independently by different Runic scholars. In all of them the first word is the proper name of the owner, the last a demonstrative pronoun following the noun, the verb is the same, and there remains but one word which is slightly differently read. Professor Stephens of Copenhagen, to whose unfailing kindness and patient attention I beg here to acknowledge the greatest obligation, remarks :—

“From the style of the whole piece I judge this laxe to date from about the ninth century.

“The staves are sharply and elegantly cut, and belong to the usual Scandinavian or later alphabet, not to the Old Northern or later English staverow.

“As so often happens in such old writings, there are no dividing marks between the words, which consequently may be differently interpreted as they are differently divided ; but I conceive the whole to be in good Scandinavian, and to offer no difficulty whatever, only we must remember that the later alphabet had laid aside the old rune for w (now usually pronounced v in Scandinavian, but not in old times), viz. þ, and therefore used instead commonly the stave for u, sometimes the stave for r, sometimes the stave for o ; here the stave for o is employed.”

“Also we must bear in mind the common runic usage : to save space and work, not to cut a letter twice when it ends one word and begins another ; thus here, SOERTHETHA is certainly SOERTH THETA. The 24 runes then I would now divide and translate as follows :—

1 1 Y T 1 1 T 1 1 T 1 * 1 V 1 1 D 1 1 1 T R D D 1 1 1

DOMNAL SELS-HOFOTH A SOERTH THETA.

“It is curious that the writer should have used the strung letter for e, but not the strung letter for d.

“A, Old English *an*, third pers. sing. present of the verb *aga(n)* to owe, own.

“SOERTH for SWERTH, sword, a form which this word has also in Old English.

“THETA, acc. sing. neuter, is the old North English THÆT, the old South English THIS. We have many pieces, both Runic and non-Runic, bearing the formula

“N. N. OWNS THIS.”

Mr. Gudbrand Vigfusson, before the discovery that the fourth rune is \mathfrak{t} and not \mathfrak{l} , pointed out the probable identity of DOMIAL, as then read, with the DUFNIAL of the sagas, a well-known Scandinavian form of the Irish name DOMHNAL. The Orkneyinga Saga, he informs me, mentions a captain of this name, a kinsman of the Earl of Orkney, who slew him about A.D. 1090, and observes that many Norsemen in the second and third generations, after the settlement in the west, assumed Gaelic names from intermarriage. We have abundant proof of similar connections in the Irish annals. Brian Borumha and his contemporary Malachy (Maelseachlainn) who succeeded Domhnall, son of Muircertach McNeill, as king of the northern part of Ireland, were both nearly related to the Danish royal families, although the latter inflicted on the Danes one of their greatest defeats at the battle of Tara, A.D. 979 : and we are told at an earlier period that “the Lochlanns, then Pagans, had many a Gadelian foster son.” Bk. of Rights, p. 41, A.D. 909. The Irish name, therefore, does not necessarily involve Irish ownership. Mr. Vigfusson first suggested the reading SEALS HEAD, but his opinion is that the inscription is not older than the eleventh century, based principally on the employment of the form HOFOTH instead of HAFOTH: besides, he remarks, “were it very old we should have a diphthong HAUFOTH.” The nickname SELS-EISTA (seal’s testicle) is found in the Sagas, and others not unlike it, as karls-hofud, *carles-head* ; arn-hofdi, *eagle-head* ; svins-hofdi, *swines-head*.

Dr. Edward Charlton, who at first regarded the second word SELSHOF as a proper name of place, now concurs also in the reading

DOMNAL SEALSHEAD OWNS SWORD THIS.

He remarks, “I believe that many of the Norsemen settled in Ireland may have retained the old Runic writing, and, besides, DOMHNAL may have had this engraved on his sword ornament when on a visit to the western isles or to the Isle of Man, where runes of a very pure character were employed to a tolerably late period.”

The Rev. Daniel H. Haigh, to whose valuable suggestion we owe the correct reading of the name, reads the line,

DOMNAL SELS-HOFOTH A SOER THETA.
DOMNAL SEALSHED OWNS THIS TRAPPING.

He observes, SOER seems to correspond to our O. E. SEARO, "ornament," "equipment," "weapon." THETA is common Norse for "this."

Thus on all hands we have the owner's name, and so, as on the magic sword of Beowulph, "*was on the surface of the bright gold with runic letters rightly marked, set and said, for whom first was wrought the sword, the costliest of irons, with twisted hilt, and variegated like a snake.*" (J. M. Kemble: *wreothenhylt and wyrn-fah*, hilt-wreathed and snake-rich, line 3394, E. Thorpe.)⁵

"Determiner l'age des inscriptions runiques," says Professor C. C. Rafn, "est le plus souvent un problem dont la solution presente de grandes difficultés, attendu qu'il n'y a que très peu ou l'on nomme des personnes qui nous sont connus par l'histoire." Domhnall is as common a name in Irish history as Amlaf or Sitric among the Northmen. There are more than thirty chiefs of this name mentioned in the ninth and tenth centuries, chiefly in the latter; some of them are clerics; of many of them nothing but their decease is recorded. The circumstances of this discovery do not warrant any confidence that the tumulus was erected over the remains of the owner of our ornament, or even that he lost his life on the Ridge of Battles: they only require his contemporary existence. Nor is it very probable that he was an Irish patriot: the adoption of the runic character and the Scandinavian language, no less than the Scandinavian cognomen "Sealshead," appear to me to preclude such a supposition. On the other hand, not only were the Norwegians and Danes in the constant practice of carrying off Irish captives of both sexes, some of whose names are to be found in the sagas, but we also know that in the middle of the ninth century "many Irish forsook their Christian baptism and joined the Lochlanns, and they plundered Ard-Macha (Armagh) and carried away all its riches"; but

⁵ This poem is attributed by Kemble to the fifth century. Beowulph, l. p. xix.

some of them, it is added, "did penance, and came to make satisfaction." On some occasions we have the Irish invoking the aid of the Danes against the Lochlanns (Norwegians), as in A.D. 852, when the men of Munster sent messages to Cearbhall, son of Dunlaing, to request that he would come, bringing the Danes with him, and which resulted in a great defeat of the Lochlanns in co. Tipperary. There is one historical Domhnall, No. 8 of the subjoined selection, who answers the condition of being an ally of the Danes; but in my opinion the tumulus is of earlier date than his time. He died peaceably, A.D. 976.

We have then among the Domhnalls of the ninth or tenth century :

- 1.—832. ^{A. D.} Domhnall, son of Ui Cennfaedladh, king of Ui Cairbre, gives battle to the Danes. Bk. of Leinster.
- 2.—910. D., son of Gairbhith, lord of Conaille (Louth), slain in Upper Kells, Meath, in battle with Flann, son of Maeillechlainn.
- 3.—917. D., son of Donnchadh, slain by the Danes in Munster (wars of G. G.).
- 4.—919. D., son of Flann, son of Maelsachlainn Rigdamna of Teamhair (Tara) defeated the fleet of Mumhar (Munster), on Loch Derg, A.D. 910, and was slain by his brother, Donnchadh, at Bruighean da choga (Bryanmore, West Meath, Joyce, 279), A.D. 921.
- 5.—923. D., son of Cathal, heir apparent of Connaught, slain by his brother Tadhg.
- 6.—951. D., son of Donnchadh, kills Aedh, the Rigdamna of Teamhair, son of Maelmonaidh.
- 7.—968. Domhnall, king of Ireland, plunders Mainister Buithe with great butchery; 300 foreigners burnt by him in one house. Another D. (No. 9) burns Lann Leire.
- 8.—978. Domhnall, son of Congalach, king of Cnoghbha (Knowth, Meath), and Amhlacibh (a Northman by his name), defeat Domhnall, son of Muircertach, at Cill Mona (Kilmorne, Meath).
- 9.—980. D., son of Muircertach, king of Teamhair, died in penitence. He made an expedition to Loch

Erne, A.D. 955 ; another to Dal Araibhe, in Down and Antrim, 959 ; transported vessels from the Blackwater to Loch Aininn (Ennell, West Meath), 962 ; burned the refectory of Lann Leire in 970 (968, 4-M.) ; expelled from the sovereignty of Meath, but invaded Meath again, 971 ; burned and plundered Chuain Eraird (Clonard, Meath), Fobhar, Disart, Tole (Fore and Dysart in West Meath), and Llann Ela (Lynally, K. co.), 972 ; plundered shrine of Columcille (Kells), 976.

- 10.—990. D., son of Lorcán, killed at Carn Fórdroma, the “Cairn or Sepulchral heap of the long ridge,” a battle fought by Máelseachlainn with the people of Thomond, and therefore not to be confused with our Ridge of Battles.

I see no good reason for supposing any of these individuals to have been the *DOMNAL* of the inscription. It may be presumed, from the richness of the ornament, that he was a person of rank and consideration, but I believe that he was, as M. Vigfusson has suggested, a Norwegian with an Irish name.

Professor Stephens refers the inscription, on internal evidence, to the ninth century ; Mr. Vigfusson, on philological grounds, to the eleventh ; and its correspondence of type with those of Maeshowe would point to a still later date, if the theory of Professor Munch be adopted, that the *JORSALA FARAR* (Jerusalem pilgrims), recorded to have broken into the Ork hill in No. 20 of that collection, really cut most of the other inscriptions, and were the companions of Earl Ragnal in his expedition to the Holy Land in A.D. 1152. This, however, is an opinion not shared by several of those who have best studied the subject. Professor Stephens assigns the Maeshowe Futhorc, No. 6½ in his series (but with a query) to the ninth century. Mr. Farrer, the discoverer, says, “Many of them are, no doubt, to be attributed to the Crusaders, but there are probably others of far earlier date than the twelfth century ;” in fact the theory that they are all nearly of one date, and *that* a date later than the forcible opening of the mound by the Crusaders, rests upon assumptions which do not bear the character of proof.

Professor Munch, indeed, in a letter quoted by Mr. Stuart,⁶ says: "Runes of this kind are *never* older than 1100 at the furthest," and to his opinion great weight is justly due. It is not, however, the opinion of Professor Stephens; on the contrary, in speaking of the similar characters on the Largs brooch, he says: "Earlier than the seventh year-hundred these runes cannot be, for they are all Scandinavian; later than about the tenth they cannot be, for the τ (here = ρ) is not strung into ρ " (Old Northern R. M., p. 591). Inferences from the position of the carvings, and the difficulty of cutting them, unless the place were open at the top, appear to me, to say the least, precarious. The chamber at Maeshowe, which is only fifteen feet square, exclusive of the sleeping recesses, must have been warmed, and to some extent lighted, by lamps probably, like the Greenland habitations of the present day; for it is impossible to imagine people remaining long in pitch darkness, or the Fair Widow INGBIORGH, however "stooping" (see No. 8, Farrer), to have been led to such a place; and the height of some of the inscriptions from the floor, which is as much as eleven feet, however difficult on other grounds to account for, would present no difficulty to Vikings. People who could build and navigate ships must have been familiar with a ladder. On all these grounds I conceive that we are not bound to accept the twelfth century for the date of all the Maeshowe inscriptions, conceding it to No. 20.

One thing is, however, beyond dispute,—the Greenmount Runes are not "Old Northern." The bronze cannot have belonged to any Saxon invader of Ireland in the seventh century. They are "Scandinavian," and it belonged to the Norwegian or Danish invaders of the ninth or tenth. Earlier it cannot be than the year A.D. 795, when the first mention of the Gentiles or pagan Danes (Norwegians) occurs in the Annals of Ulster; nor later than the battle of Clontarf, A.D. 1013, when the Danes throughout Ireland embraced Christianity, as the Danes of Dublin had done, according to Sir J. Ware, so early as A.D. 948. The Irish, according to this great authority, erected Tumuli before they embraced the Christian religion, "nor were anciently the funerals of the *Ostmen* unlike, while they remained *Heathens*." ⁷ Mr. Stuart

⁶ Notice of excavations, &c., at Maeshowe, by J. Stuart, Secr. S. A. Scot. Proc.

Soc. of Antiq. of Scot., vol. v. 1865.

⁷ Ware, ii. p. 415.

has quoted from one of the Capitularies of Charlemagne, A.D. 785, a prohibition for the bodies of the Christianised Saxons to be carried "ad tumulos paganorum."⁸ Professor Munch repudiates somewhat indignantly the notion that the cairns, cromlechs, and other sepulchral monuments of pagan times near Largo can have any connection with the expedition of Hacon (A.D. 1263),⁹ because his countrymen were then Christians, and interred as such. In short, it is needless to multiply authorities for what is so generally recognised, and we must seek between the beginning of the ninth and the middle or end of the tenth century for some event capable of accounting for the erection of a heathen tumulus, the burning of bodies, and the celebration of a heathen funeral feast in the territory of the Cianachta. I select from the Annals three such events.

The first presents itself in the year A.D. 836, when a battle was gained by the Foreigners at Inbhear-na-mbare over all the Ui Neill from Sinain (Shannon) to the sea, and Saxolbh, chief of the Foreigners, was slain by the Cianachta. In the old translation of the annals of Ulster we read: "A battle given by the Gentiles at Inver-na-mark by the Nury, upon O'Nells, from Sinan to sea, where such a havoc was made of the O'Nells, that few but their chief kings escaped." I am aware that Dr. O'Donovan disputes the addition, *by the Nury*, and considers the place of this defeat to have been Rath Inblier near Bray; but it is a coincidence not to be entirely passed over that Annagassan, which in primitive geography might be described as *by the Nury*, answers remarkably to the conditions of an Inlet of the Barques. It is about half a day's sail, or twenty miles, from the head of Carlingford Lough, and O'Donovan himself, in another place, concedes the proximity. Referring to a great battle of two chiefs of the Lochlanus (A.D. 851) against the Danes at Snuadh Aighnech (which is Carlingford Lough), he remarks, "near which, at a place called Linn Duachaill, the Norwegians had a strong fortress." Linn Duachaill, as we shall presently see, is Annagassan. Here two small rivers, the Nith, now called the Dee, and the Glyde, unite their waters at one mouth, flowing, the one from the north-west, the other from the south-west, and affording at certain

⁸ From the A. of S., vol. v; and see earlier prohibitions of burning the dead.
⁹ Chron. Mannie, p. 110.

seasons access for large boats to some miles of country. The character of either river has been a good deal altered by artificial treatment, and it is evident that they once, and perhaps as recently as a thousand years ago, were streams of much greater volume. Mr. R. Manning, of the Board of Works, Dublin, informs me that, twenty-five years ago, the river Dee was twenty-six feet wide and six feet deep at one mile above its junction with the Glyde; while the latter, at the same distance above its junction with the Dee, was fifty feet wide and seven feet deep; this was partly the effect of shoals at the mouth, since removed. They would, at that time, have been navigable for boats drawing two feet water, for a distance of three or four miles inland. A shoal in the river Glyde, one mile above the Dee, proved to be almost entirely composed of bones of animals, chiefly, to the best of Mr. Manning's recollection, those of sheep and oxen; they were so numerous as to sell for 20*l.* or 30*l.*,—probably the result of some flood. The only other discoveries were a brass pot, perhaps like that presented to St. Patrick by Daire,—“*cæneus mirabilis transmarinus*,” an imported article, which was accompanied by a perforated strainer and ladle: a peggin bound by brass hoops perforated in a pattern: and an enameled ornament or button, which was inside this vessel. These objects are believed to be at present in the museum of the Royal Irish Academy.

The next event is in the year A.D. 852, when the annals of Ulster and the Four Masters tell us that a fleet of the Black gentiles (the Danes) first came to Dublin, and plundered, after great slaughter, the Fortress erected by the White gentiles, the Finngall, or Norwegians, and there was soon after a great battle at Linn Duachaill, the place just referred to, in which the Danes were victorious; Dr. Todd, from whose translation of the ancient manuscript of the Wars of the Gaedhil and the Gaill¹ this is derived, adds in a note:—“Linn Duachaill was on the banks of the river called Casan Linné. This river is mentioned in the circuit of Ireland as a station south of Glen Riche, or the vale of Neury, and between it and Ath Gabhle or the Boyne. Part of the name of Casan Linné is preserved in the name Annagassan (Aonach g'Casan, Fair of Casan), a village at the

¹ The wars of the Gaedhil with the Danes and other Norsemen, by Jas. Heathorn Todd, D.D., 1867, p. lxii.

tidal opening of the rivers Glyde and Dee. There is a townland called the Linns, in the parish of Gernonstown, which runs down along the sea to Annagassan bridge. The Casan Linné was probably the river now called the Glyde, and Linn Duachaill must have been at the united mouth of the Glyde and Dee (Nith). For this information," he adds, "the editor is indebted to Dr. Reeves."

Between the years A.D. 876 and 916, the same chronicle informs us, "There was some rest to the men of Erinn for a period of 40 years without ravage of the Foreigners." It was the period in which the Norwegians, under Harold Haarfager, having possessed themselves of the Isle of Man, were engaged in extending their conquests to the Sudreys and Orkneys; and although there are abundant evidences in the annals that the rest of the men of Erinn was of a qualified nature, it is probable that the coasts of Down, Louth, and Meath, may have enjoyed comparative repose.

In A.D. 921, the annals of the Four Masters again conduct us to this immediate neighbourhood. They record "the plundering of Feara-Arda and Lann Leire (see p. 284, *supra*), and Fearne Rois (near Drogheda) by the Foreigners," who probably landed at Annagassan. In the pathetic words of the chronicler, "until the sand of the sea, or the grass of the field, or the stars of heaven are counted, it will not be easy to recount, or to enumerate, or to relate, what the Gaedhil all, without distinction, suffered from them, whether men or women, boys or girls, laics or clerics, freemen or serfs, old or young: indignity, outrage, injury, and oppression. In a word, they killed the kings and the chieftains, the heirs to the crown and the royal princes of Erinn. They killed the brave and the valiant, and the stout knights, champions, and soldiers, and young lords, and the greater part of the heroes and warriors of the entire Gaedhil: many were the blooming, lively women, and the modest, mild, comely maidens, and the pleasant, noble, stately, blue-eyed young women; and the gentle, well brought up youths, and the intelligent, valiant champions, whom they carried off into oppression and bondage over the broad, green sea. Alas! many and frequent were the bright and brilliant eyes that were suffused with tears, and dimmed with grief and despair, at the separation of son from father, and daughter from

mother, and brother from brother, and relatives from their race and from their tribe.”²

Under such circumstances it would be hazardous to connect the Ridge of Battle too positively with any one epoch; but I have found no records which fit the locality nearly so well as those here quoted; and if Professor Munch is correct in his belief that from A.D. 989 to A.D. 1080 the Island of Man, that perpetual source of piratical descents on the east coast of Ireland,³ was an appendage to the Norwegian kingdom of Dublin, we may conclude that the coast of Louth was free from them during that long interval. The character of the runes, as I have attempted to show, as well as the ornamentation, suggest a connection with the race that settled in that island. Neither the relic nor the tumulus in which it was found can, I think, be of so late a date as A.D. 1080, and if earlier than A.D. 979 there appears to be no event with which they may be so well connected as the battle of Linn Duachail in the year A.D. 852.

This event also but slightly preceded the first conquest of the Orkneys by Harold Haarfager, and as we read about the same time that the Danes in Ireland “left not a cave underground that they did not explore,”⁴ it is impossible to suppose that the conspicuous mound of Maeshowe escaped their cupidity. It is always regarded as the work of a race who long preceded the coming in of the Norse population,⁵ and was probably then broken first open. We have examples of repeated forcible entry into mounds. The runes or slabs 6 and 7, which Mr. Stephens regards as among the most ancient of the carvings,⁶ may have been cut not long after. As we have already seen, they are identical in every letter with those cut on the Greenmount bronze ornament, and must, as we conceive, have belonged to the same Scandinavian family and nearly the same epoch.

Reference has been already made to the bronze axe or celt, weighing nearly 20 oz., found on the same occasion, and we have ventured to hint that it may have been interred at the same time, and in use in the same age. Sir W. Wilde has remarked that even the adoption of metallic

² Wars of the G. G. § xxxvii.

³ *Chronicon Mannie*.

⁴ Wars of the G. G. xxv., A.D. 866,

p. 25.

⁵ J. Stuart, *Proc. Soc. of A. S.* vol. v.

⁶ Stephens, p. 757.

implements "was neither sudden nor universal, for so late as the ninth century stone weapons were still in use in Ire-

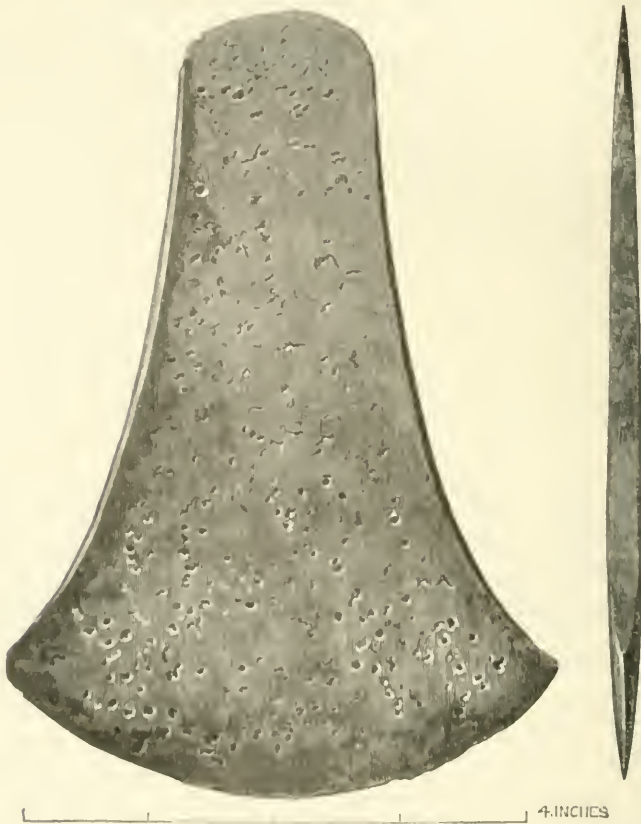


FIG. 6.

land, and stone implements were fabricated with metal, probably even with iron tools;"⁷ and we may infer with him elsewhere that bronze swords very likely continued in use until the general employment of iron, and even long after.⁸ A celtic tumulus was opened in 1848 at Anet near Berne, which yielded among other objects "une de ces haches ou coins en bronze communément appelés haches celtiques," which Dr. Todd regarded as of a date long subsequent to

⁷ *Catalogue*, p. 35; but he is speaking only of sharp stones for throwing.

⁸ *Ibid.* p. 149.

the introduction of Christianity into that country. That is, later, and probably much later, than the end of the sixth century.⁹

Unfortunately the Irish annals, while abounding in vivid poetic descriptions of battles, deal, for the most part, in general language with the equipments of the warriors. We are left to guess whether the "two thick-headed, wide socketted battle-spears, with their rings of gold about their necks," which Conn of the Hundred Battles wielded at the battle of Magh Leana,¹ were of bronze or iron; but we are informed that this hero of the second century employed the former metal for defensive armour. "He put his light strong leg armour, made of fine-spun thread of Finndruine, upon his legs," and this is explained by Mr. O'Curry to be "a kind of fine bronze used chiefly in ornamental works by the artists of ancient Erin."² There are also more direct passages which support the view that the employment of bronze may have descended in Ireland many centuries beyond the Christian era.

"The stipend of the king of Drung, which is not small,
From the king of Eira 'tis not contemptible,
Three curved narrow swords,
And three ships very beautiful."³

I believe that an ancient *curved narrow sword* of iron is unknown in any collection, but the description applies exactly to the ordinary bronze weapon, and it is perhaps in Drung (Kerry) that their use would linger the longest.

"Whoever wishes for a speckled boss
And a sword of sore inflicting wounds,
And a green javelin for wounding wretches,
Let him go early in the morning to Ath-Clíath."⁴

"This day Bruide fights a battle for the land of his grandfather,
Unless the Son of God will it otherwise, he will die in it.
To-day the son of Oswy was killed in a battle with green swords."⁵

I do not venture to affirm that the ascribing to a weapon

⁹ Proc. of R. Irish Academy, vii. p. 42.

¹ The battle of Magh Leana, transl. by Eugene O'Curry, 1855, p. 113.

² O'Donovan, however, defines it as German silver. Three Fragments, p. 57, and is followed by Sir W. Wilde. The white metal of the exquisite Ardagh chalice found in 1869 would, according to this

identification, be *Finndruine*, but it seems a metal ill adapted for any purpose of defence.

³ *I ealbhan na g'Ceart* or Book of Rights, O'Donovan, 1847, p. 85.

⁴ Four Masters, A.D. 917.

⁵ A.D. 704. Three Fragments, transl. by O'Donovan, 1860, p. 111.

the colour assumed by bronze when not kept bright, amounts to proof that such was the metal employed, but it favors such a view. The description is not applicable to iron weapons, and the epithet seems not very likely to have been applied to the shafts or mountings. We find it applied to a Danish spear in an age when we know that the Danes used iron exclusively. "Strong, broad, green, sharp, rough, dark spears, in the stout, bold, hard hands of free-booters" were plied at Clontarf;⁶ but to this it may be answered that when an epithet has once acquired a fixed poetic use it is apt to be employed long after it has ceased to be literally correct. We still talk of our wooden walls and our hearts of oak in metaphors out of date; but when we read of red gold, purple mantles, red cloaks, blue cloaks (*Bk. of Rights, passim*), we understand the language literally, and probably any one reading of blue swords would at once associate the epithet with weapons of steel or iron, to which, in fact, it belongs. Thus we read of Donagh Mac Namara:—"His expert, keen pointed, blue colored, and neat engraved dart, . . . his long blue-edged, bright steeled, sharp-pointed dagger;" and certain captives are exhorted "to shake and rattle the beautiful bright iron chains which are fastened to your well formed fetters of blue iron," for "there was a bright fetter of blue iron between every two of the heroes of the race of Conall and Eoghan at that time."⁷

But we have this term applied to a sword, in a passage which applies the other to a spear.

"There is Domhnall in the battle

* * * *

Oh the size of the expert blue sword

Which is in his valiant right hand

And the size of his great shield beside it!

The size of his broad green spear." *

The term has, in fact, been used in bardic versions of events of so early a date that if they have any historical basis at all, we must suppose bronze weapons to have been in use in Ireland. Thus "there came not a man of Lohar's people without a broad green spear, nor without a dazzling shield, nor without a Liagh-lamha-Liach (a champion's hand

⁶ Ware of the G. G., p. 159.

⁷ A. D. 637. The Battle of Magh Rath,

⁷ Battle of Magh Rath, p. xiv. and p. 197.

179, transl. by O'Donovan, 1842.

TUMULUS, KNOWN AS GREENMOUNT, CASTLE FULINGHAM, IRELAND.



SECTIONS THROUGH THE GREENMOUNT TUMULUS.

Fig. 2. *continued.*

- Fig. 1.—Section E. to W.
a a. Ridges, apparently traces of foundations
b b. Sea sand found here in cutting sections
c. Hereabouts the Runic plate
 Fig. 2.—Section N. to S.
d. Boundary of the position.

- e*. Slight remains of a vallum traceable towards the west end
f. A hollow, apparently artificial; possibly another entrance.
g g. Teeth and bones of animals found
h. Boundary on the south. A hollow road.

Fig. 3.—Plan of the chamber from above, showing the eight roofing stones (twice the scale).

stone), stowed away in the hollow cavity of his shield,"⁹ to the battle of the Ford of Comar. This was in the first century B.C. The annals of the wars of the Gaedhil indeed are full of allusions to the superiority of the Danish weapons : even so late as the Norman conquest,

" Unequal they engaged in the battle,
The Foreigners and the Gaedhil of Teamhair,
Fine linen shirts on the race of Conn,
And the Foreigners one mass of iron."¹

And the occurrence of "masses of iron" among the regal tributes in the Book of Rights, recalling one of the prizes in the Homeric games,² suggests that in both cases the metal had a character of rarity consistent with the contemporaneous employment of bronze, for a purpose for which it is almost equally suitable. As a matter of fact, very little iron is produced in Ireland to this day.³ The battle-axe, singularly enough, is not mentioned as a weapon in the metrical account of the Battle of Magh Rath ;⁴ it cannot have been in very general use at that date ; and the statement of Giraldus Cambrensis, who, on the other hand, does not mention the sword, that the Irish employed "broad axes excellently well steeled" in the twelfth century, does not preclude the supposition that some old bronze ones may have been seen on the battle-field so late as the ninth. I cannot, under any probable theory of accident, otherwise account for the presence of one in this tumulus, if the circumstances under which it was found have been correctly ascertained.

I will conclude these remarks by one or two statements called for by certain inaccurate reports, such as generally obtain currency on these occasions.

(a.) The bronze ornament was, by the workmen's account, attached to something in a very rotten and mouldy state, doubtless a strap of leather. The presence of the cavity at

⁹ Quoted by Sir W. Wilde. Catalogue. p. 73.

¹ Miscellany of the Celtic Soc. p. 70.

² Iliad, bk. xxiii ; Book of Rights, pp. 97-105.

³ There is an anecdote in the life of St. Columba (A.D. 624-704) as to the use of iron in his day, which may be quoted for its simplicity and a slight suspicion of the quality of the metal. The saint was besought by a brother to give his blessing to a

weapon, "*ad jugulandos tauros vel boves*;" he does as requested, but warns the petitioner, "*Ferrum quod benedixi confido in Domino mea quia nec homini nec pecori nocet*," accordingly the brother, "*Vallum egressus monasterii, bovem jugulare volens, tribus firmis vicibus, et forti impulsione conatus, nec tamen potuit etiam ejus transfigere pellem!*" (p. 113.)

⁴ See O'Donovan note p. 192.

the top of the mound ensured a great percolation of water, and at the time of the excavations, which were during and after heavy rain, the soil below it was very wet. They threw the strap away, and it could not be found.

(b.) We discovered no sign of an interment, either at the level of the bronze, or at the level of the passage. Professor Corte, of Trinity College, Dublin, who has kindly examined about one-third of a bushel of bones and teeth, can find no human remains among them. These bones and teeth were scattered throughout the soil moved, which I calculated at about 52 cubic yards. They can hardly be said to have been much more abundant in one place than another. Professor Corte had fully half of what were thrown out.

(c.) The marrow-bones were all split, and many of them bore marks of the fire, but no marks of having been gnawed. A great proportion of them were of young and immature animals, such as would be preferred for food, and were probably consumed in larger proportion in early ages than is the modern practice, from the difficulty of feeding them in winter. For this suggestion I am indebted to Professor Rolleston. The fact is shown by many of the teeth in jaws found not having completely pierced the gums; they give the idea of a great funeral feast having been held on the spot, the relics of which were gathered up with the surface soil to form the mound.

(d.) The base of the mound in the centre, or at the north end of the passage, seemed to be composed almost wholly of sea sand; this was not observed at the south end. A cut was made in one of the transverse ridges across the end of the *Druim*, and this, too, disclosed, at a depth of not more than 2 or 3 feet, a pure dry sea sand containing minute fragments of shells and a little lime, probably arising from their decomposition. The inference seemed to be that the ridge itself was once a promontory washed by the sea, although it is now a mile and a half distant; but that such was the case so recently as the ninth century, is disproved by the allusions to the Port of Annagassan in the Annals, and by the present elevation of the ground: the base of the mound is above the 100 feet contour on the Ordnance Survey. It creates, however, a difficulty in determining how much of it is artificial, which cannot be solved until further excavations have been made.

(e.) The centre of the tumulus appeared to have the character of a true cairn. It was composed of a mass of portable round stones of moderate size, perhaps all under the quarter of a cubic foot. The section presented at the south end was a dry gravel for about 5 feet above the passage, then as much alluvial soil, then 2 feet of a coarse gravel, then bands of clay and gravel for 4 or 5 feet more. There was nothing particularly artificial in its appearance.

(f.) It has been suggested that this long passage, 5 feet high, and 3 feet 4 in. wide, leading apparently to nothing, and with nothing evidently sepulchral about it, may have been somehow constructed for shelter or concealment. Unless, however, further explorations should show a connection with undiscovered subterranean chambers of larger dimensions, I am persuaded that this theory is untenable. The space is too contracted; there is no trace of any access to it; and it is almost incredible that so much labour should have been expended on such a structure, at a date when the Round Towers and other architectural remains show the Irish to have been capable of building masonry structures above ground, in which they would have been much more secure against their enemies.

Original Documents.

IN the indenture printed at p. 131 of this volume will be found the instructions or ordinances under the privy seal of the king for working the silver mines of Byrland or Beer, in Devon, during the 29th and six following years of the reign of Edward I. In the introductory notice of that document I pointed out that, incidentally, it threw light on the relation and dealings between the king and the great Florentine firms of bankers to whom he resorted for financial assistance in carrying on the costly wars in which the first and third Edwards were constantly engaged both within the four seas and beyond them.

I now propose to supplement that paper by the accounts rendered to the Exchequer by Thomas de Sweyneseye (Swansea?) who had been appointed to be the Custos or Warden of a part of the royal mines in Devon.

The mine or mines (*minere*) on which the works were carried on, were in fact wholly in that county on the Tamar river; though the indenture and workings under it incidentally refer to places on the Cornish side of the river, such as Altonon, Cadstock, and the adjacent woods, near which the refineries for desilverizing the lead, and the timber used for superficial, or underground, work on the mines, were situate.

The accounts rendered by the Warden to the Crown extend over seven consecutive membranes, forming one roll, in which each membrane contains a single year, or part of a year, to which it relates. Substantially, each account refers to the receipt of the moneys, &c., supplied to the works during one year, and the sources of the money or funds so supplied, the work done, and all the expenses incidental to the works, down to the time of the delivery of the proceeds, so far as regards the silver, to the Mint at the Tower of London, or of cash balances paid into the Exchequer on tallies. These particulars form, in effect, a complete conspectus of the practical operations on the mines from the bringing up of the ore, called, in its natural, unmetallized state, *black work* (*nigrum opus*), till the fusion by metallurgical processes into *white silver* (*argentum album*) in a state fit for delivery at the Mint in mass.

So long as the ore is in its unbroken, or black state, the process of dressing it is not materially different from that employed in other metalliferous mines in the West; the pick, the gad, and the shovel, are the implements common to all, as well as the clearing of the underground cavities from water by wheel and bucket, and drawing up the rough produce to be dealt with in the lavatories by washing (*lotura*). But the separation of the precious metal from the less valuable stuff, which constitutes it, is a process of more difficulty, and is not common to all metallic

ores. Whether the particulars in these accounts are sufficient to enable an intelligent reader to detect the nature of this last process adopted at these mines is for consideration hereafter.

The notes introduced under the text, together with the supplemental observations at the close of it, may serve to explain some technical difficulties or doubts in the record itself. The accounts will be found among the Foreign Accounts of the above years among the so called "County "Bags," Devon, 9a.

MEMBRANE I.

The first part of this membrane has been torn and mutilated, and can only be now partially read. I have therefore selected only the second membrane to be transcribed *verbatim*. It is plain, however, that the account rendered in the first contained, generally, matters of the same kind as the rest. It shows, also, that the works were not in new or untried ground; for the earliest items begin, as might be expected, with the clearing and repairing of the old adits, and drawing out the water from the works both underground and superficial; and the wages then paid to the miners imply that they were employed chiefly on what is now called "tut-work," that is, work measured, not by the value of the ore returned in gross, called "tribute," but task-work.

MEMBRANE II.

The following is an office copy of the entire roll for the year 29 & 30 Ed. I.

Compotus Thome de Sweyeseye clerici custodis minere domini Regis in comitatu Devon. et Cornub. a festo Sancti Michaelis anno Regni Regis Edwardi 29 usque idem festum S. Mich. proxime sequen. anno 30.

Recep. denariorum de Vicecom. Devon'] (The headings of the several entries, which are in the margin of the original roll, are here indicated by italics followed by a bracket).

Idem respondet de 20*l.* recept' de Thomâ de Ralegh' vicecomite Devon' apud Exon' die mercurii prox. post festum S. Hilarii anno regni Regis 30. Et de 30*l.* recept de eodem apud Exon die mercurii prox' post festum S. Gregorii pro anno supradicto. Et de 30*l.* recept' de eodem apud Exon' 23 die martii anno supradicto.

Summa 89*l.* [erased by a line across].

*Recept' denariorum de stagmine.*¹] Et de £52 18*s.* 8½*d.* recept' de exitibus et proficiis stagminarie Regis in comitatu anno supradicto. Et de £26 13*s.* 4*d.* recept' de abbate de Tavystok de quodam fine facto cum domino Rege pro licentiâ habendâ super appropriationem ecclesiarum de Whyte cherche et Westleye.²

Et de 128*l.* 17*s.* 7½*d.* recept' de exitibus et proficiis maneriorum Regis de Bradenesh, Lydeford, Dertemore, Kenton, et Wyke ut patet per computum inde in Scaccario Regis redditum hoc anno.³

¹ *Stagmen* is one of the old forms for stannum.

² This shows that the crown had authorised the payment of this fine directly to the Custos.

³ No doubt the rents and issues of these five manors, parcel of the Earldom of Cornwall "in manu Regis," had been paid to the Custos, and allowed in account by the Exchequer.

Et de 5s. receptis de placitis et perquisitis Beremoti in minerâ hoc anno.⁴

Et de 5s. recept' de quodam quarrerio rupto ad conservationem minere prius deputato, vendito abbati de Boeland.

Summa 204 £ 2. 7½.

Expense.] Inde computat in vadiis Mathei de Hetchcote clerici supervisoris minere supervidentis operationes et operarios in eadem et in anidod' etc. ut supra, pereipientis per diem sex den' per 351 dies prece- dentes, 8 £ 15. 6., sicut continetur in rotulis de particulis⁵ inter custo- dem et contrarotulatorem indentatis. Et in vadiis forestariorum custodientium bosum Regis de Kalistok et bosum de Bucombe per tempus supra dictum, 71s., sicut continetur ibid'. Et in vadiis Henrici de Pridie providendis cepum et facientis candelas pro luminar' in minera, pereipientis per septimanam 17d. per tempus supradictum, 88s.; sicut continetur ibid'. Et in vadiis fabrorum facientium diversa utensilia pro minera et in aliis operationibus ibid' per idem tempus, 6 £ 18. 10., si- cut continetur, etc. Et in ferro et calybe per diversa precia pro diver- sis utensilibus in minera, et aliis diversis operationibus ibid' inde facien- dis cum car'⁶ de diversis locis 8 £ 8s. 4d. sicut continetur, etc. Et in cepto empto per diversa precia ad candelas pro minera et affinationibus et aliis operationibus ibid' inde faciendis per tempus supradict' cum car'⁶ de diversis locis 22 £ 19. 8d. sicut continetur, etc. Et in cordis canab.⁷ empt' ad aquam, terram, et lapides de minera et veteribus anidod' extra- hend' et minerarios, merem', 'et utensilia avaland'⁸ per idem tempus cum car' de diversis locis, 10 £ 15s. 4d. sicut continetur, etc. Et in curiis bovinis empt' per diversa precia pro bulgis inde faciendis ad aquam de minera extrahendam, et foll(ibus) fabrorum reparandis et emendan- dis cum car' de diversis locis per tempus supradictum 11s., sicut con- tinetur, etc. Et in factura bulgarum predictarum per tempus supradict' 3s. Et in carbone more empt' fabricis Regis in minera cum car' de diversis locis 108s. 3d., sicut continetur, ibid'. Et in uno batello empto ad passagium inter Birland, ubi minera existit, et Calistoke ubi mora⁹ Custodis minere, bole, fornelli, et affinationes et operationes diverse existunt, 8s., sicut continetur ibid. Et in emendatione ejusdam veteris batelli longi cum bordis et clavis emptis ad eundem 13s. 3d.; et in expensis ejusdam nunciî euntis de minera ad London ad dominum

⁴ The "beremote" here referred to was not, I apprehend, named from the place where the mine was situate—viz., Bir or Byr,—but from the local court and plead- ings therein, which it was the practice of the Crown to establish for the conve- nience of the miners. In the Derbyshire mining district it is still called the Bar- minge, and is equivalent to the court of the *Bergrichter* of the German mines. See the notes of the reported case of *Vice v. Thomas*, heard by the Lord Warden of the Stannaries in 1843, and published in London in that year.

⁵ These particulars were the vouchers produced and showed to the officer who audited the account, but they do not

generally appear in these rolls, which are only abstracts. They were no doubt produced to the "visores" or viewers of account present personally in the court. —*Madox, Excheq. vol. 2 (ed. 4to.), pp. 292-3.*

⁶ Cartage from place to place.

⁷ Hempen ropes.

⁸ i.e., to lower miners, timber, and tools.

⁹ "Mora" is interlined above the two adjacent words below it. It seems that the situation, or place, where the refineries were, and where the warden resided, were on the opposite side of the Tamar.

Thesaurarium super statum minere certificandum, cundo, redeundo et morando, 3s., sicut continetur ibid.

Summa 79.£ 13s. 2d.

Solutio pro facturâ anidodorum et reparatione minere ad buscam.] Idem computat in solutione facta Hugoni de Morneshale et sociis suis minerarum, Thome Robyn et sociis suis minerarum, Roberto filio Ricardi et sociis suis, et P. Le Hore et sociis suis,¹ in partem solutionis 1026d. in anno preterito prescript' pro factura anidodorum et reparatione minerarum per conventionem cum eisdem minerariis factam prout patet in indenturis inter Custodem et contrarotulatorem ex parte una, et dictos minerarios ex altera [parte] confectis per tempus supradictum, 343.£ 18s. 5½.

Vadia Custodis minerarum.] Idem computat in vadiis ejusdem Custodis minere predictæ a die Sancti Michaelis anno 29, usque ad eandem diem S. Michael' proxime sequentem, anno regni Regis 30 per annum integrum, videlicet, per 365 dies, ult' die comput', percipientis per diem,

Summa [blank].

Vadia contrarotulatoris.] Et in vadia R. abbatis de Tavystoke contrarotulatoris minere predictæ per tempus supradictum, videlicet, per 365 dies, ultimo die comput', percipientis per diem.

Summa [blank].²

MEMBRANE III.

Of the five remaining membranes the substance will be here stated in a mere outline or abstract, specially including those words and descriptions, which tend to illustrate the nature of the works executed in the course of the extraction and preparation of the black mineral or ore, and in the further process of separating the silver (white metal) from the sulphide of lead, or galena, and preserving each product separately.

Compotus Mich. 30 Ed. I., and Mich. 31 Ed. I.

"De argento albo de exitu minere nil respondet quia plumbum fusum inde proveniens non peraffinatur hoc anno, sed in custodia coram Custode et contrarotulatore remanet, et in cakis³ plumbosis usque ad annum sequentem ;"

It seems that in this year the lead had not been sufficiently desilvered, but was retained in its mixed state for future treatment.

"De 4s. . . receptis de corticibus venditis provenient' de busca prostrata ad meremiandum et suppodliandum, et ad minam comburendam et fundendam per bolas et fornellas, et domos affinatorum et aliarum officinarum inde faciend' et construend'." ⁴

The timbering and propping must have been chiefly for pit work.

"In 159 ladis, 5 discis, mine lote et mensurate emptis, de quibus 143 lade, 5 disci, mine decimalis sunt empt' de rectore de Byr, precii

¹ These working miners and their fellows, or "pairs" (as they are now called), had no doubt made contracts to repair the mine by task-work.

² Neither amount nor rate of wages is here stated in either of the two last items of account.

³ A cake is still a technical term for melted silver lead.

⁴ The word "*mine*," whether in Latin or English, usually applies to the ore as detached from the rock or matrix, and not to the place of operation or extraction here called the "minera."

lade 11s., de quibus subtrahuntur eidem rectori 9 denr. de qualibet lada decimali ad opus minerariorum, nomine loture ejusdem mine decimalis, 37 £ 9s. 9d. ; unde de nigra mina 120 lade, 1 discus ; et de albâ mina 31 lade, 4 disci—Novem disci faciunt ladam."

It should seem that the Warden bought of the rector the tithe of the ore dug on his glebe ; or that tithe was paid to the rector as such, deducting the expense of washing, without which the ore would have been of little value. That the produce of mines was at this time supposed to be titheable in Cornwall and Devon, appears from other authorities. A fixed sum was, and still is, claimed by the bishop as, and for, tithe ; but the origin of this claim is obscure.⁵

The following expenses appear under that head : The wages (*vadia*) of Walter de Horsham, for superintending the works above and below the surface, and also the smelting (*fusiones*), refining, and measuring, as contained in the roll of particulars. The wages of the keeper of the woods of Calistoke ; of the workmen and their assistants or helps ; of the "*bolarii*" burning and fusing by boles ; of the "*fornellarii*," "*cum conflatoribus et fundentibus nigrum opus, et albam minam* ;" for clearing a conduit of water running to the furnaces (*fornellas*) ; for cutting wood and blocks (*blockas*) for boles, and "*trunks*" for the refiners ; and carpenters for building and repairing the huts, &c., of the refiners.

The expense of a certain "*bola*" in Byrland ; of sawing planks, and breaking stones ; repairs of boats and barges ; timber for the mines, and for the ferry over the Tamar ; hay for horses ; iron and steel for various purposes ; an anvil for the king's use ; tallow for candles ; cords and hemp for bringing up the ore, water, earth, and stones from the "*andlods*" ; cowhide for making "*bulgi*" (buckets or leather bags) ; charcoal for fusing black ore for the furnaces ; moor coal and sea coal ; canvas for sacks ; and the expense of assaying and washing the ore, and making a pit (*pnteus*) on the works, to be used as a prison for malefactors and bad workmen.

MEMBRANE IV.

Comp. Mich. 31 Ed. I. to Mich. 32 Ed. I.

Among the receipts of this year are the following : Receipt' 130.£ 6. 5½. in moneta in cambio Regis London' per pondus 21 die Decemb' provenient' de 132 £ 5s. argenti albi in massâ de exitu minere Regis Devon., appreciat' ad libram per 3d.½ in decremento, et de 27s. 2d. de incremento per numerum, provenient' de dietis 130 £ 6. 5½. receptis in moneta ut supra ; viz. ad libram 2d.½ Summa denariorum cum incremento 131 £ 13s. 2½d.

Among the receipts for "*barren lead*" (*plumbum sterile*) sold, are £39 and 3½d. for 13 carrats and half a quarter of a foot (*pes*) of lead from the cinders resmelted (*refusus*), and after being so resmelted sold at 65s. per carrat, each carrat containing 24 feet (*peses*), and every foot 70 lbs of lead, at 2s. 6d. per foot.⁶

⁵ As to the tithe of tin see the reference in the appendix to the Report of Vice-Chancellor, pp. 11 & 25, referred to *supra*, in note 4 ; citing records of 18 Joh. ; 10 Ed. 2 ; 34 Ed. 1 (Rot. Parl. vol. i. p. 154, printed edition). The entry

of miners on church glebe was objected to temp. Ed. 3 ; yet the cemetery of Helston church has long been regarded as subject to tin bounds, and therefore liable to be worked.

⁶ i.e., a foot of lead so resmelted con-

Under necessary expenses are the wages of smiths; of bolarii for burning and smelting "per bolas," and keeping the ore safely by self and helps; of the fornellarii with their fellow blowers of the black and white ore, and of woodcutters preparing wood and blocks for the boles; for the purchase of moor coal and sea coal for the King's works; for making charcoal for the smelting of black ore at the furnaces and hearths (*astru*) of the refiners; for the cinders, or ashes of tan (*cineres de tanno*) bought for the refiners; and for the breaking and washing of the black ore (*nigrum opus*); for canvas to make sacks; and for the carriage of the white silver "in massâ de exitu minere usque turrin London' ad cambium ibidem"

MEMBRANE V.

Compotus from Mich. 32 Ed. I. to Mich. 33 Ed. I.

The receipts this year from the Mint of London are £122. 18s. 6½*d.* by weight on 1 Oct., for £124 9s. 8½*d.* of white silver in mass reckoned at 3*d.* per pound "in decremento;" and 25s. 7¼*d.* "de incremento per numerum" coming from the said £122 18s. 6½*d.*

There were several other deliveries of silver at the Tower by weight (per pondus) in the same year. One receipt is for the sale of bark from timber cut down for timber and pit work.

Another receipt is of "dishes" of ore measured and bought of the Rector of Byr as part of his tithes, as in compotus No. 4, *supra*.

Among the necessary expenses are "aqueductus pro lavatoriis; ferrum, cepum, cannabum et cordas de cannabo; bulgi ad aquam de minera et anidod' extrahenda," and also in factura bulgeorum, et cum uncto porc' ad creatoream.⁷

In uno cribro creico cum tribus cribris ligneis emptis pro cineribus affinatorum cribrandis 16*d.*⁸

In extractione aque anidod' in minera de Foxwalle.

In scrutinio mine facto juxta Plympton per R. de Dunteshale et alios. The account closes with the delivery to the King's Chamberlain at the Exchequer of the issues of the mines—£200 by tally.

MEMBRANE VI.

Compot. Mich. 33 Ed. I. to Mich. 34 Ed. I.

Among the receipts are monies "provenient' de argento albo de exitu minere per cambium, etc.," as in former accounts, viz.

"Respondet de £243 18¼*d.* receipt' in moneta ex cambio Regis London per pondus, convenient' de £2491 6s. 2*d.* argenti albi in massâ de exitu minere Regis, Devon, appreciati ad libram per 6*d.* in decremento; et de 5s. 7¾*d.* de incremento per numerum, convenient' de dietis £243 18¼*d.* receipt' in moneta ut *supra*, videlt. ad libram 2½*d.*—Summa cum incremento £245 12s. 2*d.*

Among the expenses are the purchase of "1321 lade, 3 disci minere lote et mensurate, de quibus 1189 lade, 2 disci mine decimate sunt

tained 70 lbs., and a carrat contained 21 feet at 2s. 6*d.* per foot. It appears that the lead so desilverized (*i.e.*, minus the pure silver) was sold at 65s. per carrat, and applied to the general expenses of the works.

⁷ *i. e.* the purchase of bacon fat for

carrying the leather buckets. The forms "bulga," "bulgus," and "bulgens," and fornella, or fornellus, are used indifferently in these accounts.

⁸ These sieves of hair, &c., were evidently used for the separation of the silver in the furnace.

minerariis empt' de rectore de Byr precii lade 2s. ; de quibus subtrahuntur eidem 9 denarii de qualibet lada decimali ad opus minerariorum nomine loture ejusdem mine ipsum rectorem contingent' per breve Dom. Regis Custodi predicto super eo directum, £310 10s. 3½d. ; unde de nigra mina 1235 lade, 7 disci ; et de alba mina 85 lade, 5 disci—Novem disci faciunt ladam."

Other expenses, such as wages of W. de Horsham, clerk, supervisor of the "campus minerarum," and of the works below and above ground, and of the smeltings and refiners, and workmen there ; and the mensurations of the ore, 21d., and sometimes less, for the above time ; and the wages of bolarii and fornellarii for the blowing and fusion of black work ; the wages of the refiners, and woodcutters for timber and blocks for boles and trunks for the refinery with cartage and portage ; wages of sawyers and carpenters employed in the making and repair of boles, furnells, houses, and other various engines (*ingenia*) ; and for carriers of timber and blocks, purchases of horses, of oats, harness and charcoal (*carbo de boseo*), water for the lavatories ; buckets (*buly'*) for drawing the water from the anidods ; purchase of "*carbo maris et more pro fabricis Regis* ;" the hire of eight pair of banastr' ⁹ to convey coal and ashes (*cineres de tanno*) for the refiners ; the lotura (washing) of the black work ; the hire of barges to carry ore from the mines to the river Tamar, and for the construction of a new engine "*eiusdam novi ingenii*" for smelting the ore ; and for the carriage of the produce of the silver to the Tower of London "*ad cambium Regis ibid.*," and of a "*garcio*" (messenger) sent with the King's writ issued from the Court of Exchequer to search and inquire for miners of the King at the Peake ("*in Pecco*") 10d.¹

This roll closes with an entry of a payment to the Chamberlains of the Exchequer of £1,200 from the issues of the mines, by 3 tallies.

MEMBRANE VII.

Computus from Mich. 34 Ed. 1. to 13 May 35 Ed. 1.

After the usual receipt in respect of white silver at the Mint, there is a receipt by sale of barren lead as in a former roll, viz. £95 14s. 1d. for 47 carats and half, and 9 feet, sold at 40s. *per corrat*, and at 20d. *pro pede*. The account closes with a delivery into the Exchequer of £300 by tally. Here the roll of accounts ends.

I have already stated that the mode of clearing, draining, breaking, and bringing to grass the mineral contents of a lead mine is not likely to have differed much from the ordinary process in other metalliferous mines. The workings on behalf of so solvent an adventurer as the crown were probably on a large scale ; yet I do not observe in the above par-

⁹ *Banastre*.—See Ducange, sub tit. *Banastus*, *Banastura*. A large wicker basket for various purposes. A pair of these would be the lead or double lead of a pack-horse. In one of the examples above cited by Ducange it is described as a miner's heaped measure.

¹ The practice of impressing miners for

the king's mines in this mining district in Derbyshire is shown in other records. See the notes in the Appendix to the Report of Vice r. Thomas, a case decided by the Lord Warden of the Stannaries in May, 1812, and published, London : Saunders & Benning, 1843. See *Ibid.*, Appendix, pp. 93, 118-120, 121, 123, 124, E. S.

ticulars of the work, either subterranean or superficial, anything that seems to point out the use of stamping engines, or any unusual machinery for unwatering the excavations, vertical or lateral, of the underground diggings. Stamps, in the usual sense, are of comparatively modern use. Beckman (History of Inventions), does not carry them back, even in Germany, further than the fifteenth century, and I can easily believe that the hand mills, still occasionally found on the site of ancient mine-works, of which some on a large scale have been lately produced for our inspection, and are figured in the present volume of the journal of this Institute, may be relics of inartificial early modes of trituration. See also another instance noticed Beckman, under the same head, *ubi supra*.

It is probable that the "trunks" referred to among the items of expense in the above accounts (Membrane III.) may be the equivalents of the shallow vessels or troughs lined with timber, which are mentioned by Dr. Borlase in his description of the washing or buddling process in tin works, illustrated by a plate in his Natural History of Cornwall, and also described in De la Beche's Report on the Geology of Cornwall, &c., pp. 576 to 580. The "bulgi," or leather buckets, would also be applied to the draining of the adits or "anidods" which are noticed in almost all the above accounts, and are explained in my former paper in this volume. This word, written in the several forms of *anidod*, *anidod*, *avidod* or *auidod* (of which the last is probably the more correct), has been usually left unexplained by record agents. It is impossible for any one familiar with the technology of mining to doubt that it is a translation, or clerical misspelling, of the word "audit," of Carew, now spelt and called "adit."

With regard to the process resorted to for desilverizing the lead I have submitted the language of these accounts, and also of another instrument, nearly of the same date, recorded on the rolls of the Exchequer, among the memoranda of the Lord Treasurer's Remembrancer, 25 to 26 Edward I., to Dr. Percy, who informs me that the process can be recognized as the only mode or process known at the period to which the documents relate.

Of the document last mentioned, I will select a short extract :

"Que les carriages de mine face si tost come la mine seit mesuree jusques au boles, ou aillours, e qe les bolers e les autres fundours y'sceint en propre persons et meintenaunt la receyvent per taille come a ceo appeint, e q' toute la mine soit fondue par bone survese. E si toste come le plumb sera fondu et merche (marked) soit poise e livre as gardeyns en lour commune garde par les fondeurs e par taille faite entre les gardeyns, e les fondeurs . . . come avaunt ad este illoques usee ou de user sont eux comaunde et ordene. Et puis qe cele plumb seit livre as affinours pur affiner par quantitez, e a noubre de piez poises, e qil endemoergent chargiez en la manere q' ensuit, cest a savoir, si tost come le plumb sera descendu et avalee des trunks en la cendree avaunt q' le cendre eyt rien beu del plumb, q'om face cet plumb mover e medslr qe par tut soit ouiment bon est [that is to say, so soon as the lead shall have sunk and been absorbed by the trunks on the cinders, and before the cinders have imbibed (beu) any of the lead, let it be stirred, so as to be of uniform goodness]; q'om face prendr' meyntenaunt sus une come de la mountaunce de 6s. en le entrepoisant de plum, e qe cele une quant' soit partie en deus moites; e lune moitie sois livree al affineurs desus les seals de gardeyns,"

&c.—The record then goes on to direct that one of these moieties be assayed by the King's Assayer, in presence of the wardens and refiner, and that the refiner shall be charged to answer at the rate of that assay for the whole quantity so refined, &c.

The language of this part is not free from obscurity ; but I apprehend that it describes the manner of making a *test*, and thus ascertaining the probable proportion of the pure silver to the lead in the quantity of the lead submitted to it.²

Dr. Percy, who has kindly assisted me in this matter, considers that the lead was refined on a test made of consolidated wood-ashes ; that the lead was then removed as litharge ; and the silver left in the form of a cake. The passage last cited, and the other various entries in the accounts seem fairly to admit of this construction.

With regard to the *boles* referred to in the accounts, it is pretty clear that the foresters and wood-cutters were engaged in finding materials for them (see Membranes IV. and VI.) The articles of cinders and of ashes are also mentioned in regard to the smelting and refining processes, so that the *boles* (a term not unknown in old lead mining districts, both in Derbyshire and elsewhere, as denoting the sites of ancient smelting works, of which examples are pointed out in Dr. Percy's late work on the metallurgy of lead, p. 216) would seem to have been formed from wood ; unless, indeed, we are to conclude that the "bole" is itself the furnace or apparatus for separating the silver from the lead. This is a matter on which I can express no clear opinion. The word has ceased to be used except in reference to old, abandoned works. They are indirectly noticed in the Glossary at the end of Pettus's *Fodine Regules*, and in several other provincial glossaries.

The several kinds of fuel noticed in the accounts are *carbo maris*, *i.e.*, coal from beyond sea or imported by sea ; moor coal, *i.e.*, peat or turf, including perhaps furze and heath, both used as fuel formerly, and still so employed to some extent ; and also charcoal. It is possible that culm or anthracite may also have been also used ; but these quarries seem to be too far distant from the workings and boles at Beer to have been conveniently available.

E. SMIRKE.

² This passage is referred to and translated at pp. 247, 248, of the Appendix to De la Beche's Report on the Geology of

Cornwall and Devon, ed. 1839 ; but the copy of the original supplied to him was in some respects defective.



Royal Archaeological Institute of Great Britain and Ireland.

BALANCE SHEET FOR THE YEAR 1869.

RECEIPTS.

	£	s.	d.
To Balance at the Bank, 1st January, 1868	76	0	4
By Balance at the Bank, 31st Dec. 1868	34	9	9
By Annual Subscriptions, including arrears and payments in advance for 1869	582	15	0
By Entrance Fees	30	7	6
By Life Contributions	82	19	0
By Sale of Publications, &c.	57	11	6
By Donations, &c., to Royal and Local Societies	80	1	6
By Subscriptions to News	8	12	0
By Ticket of Fare to Bury St. Edmunds Meeting	113	16	7
By Balance on Jan. 31st 1869	5	1	1
By Investment Account	200	0	0
Sale of 15 N. & S. per 1000 of 1868			

£1250 14 8

EXPENDITURE.

	£	s.	d.	£	s.	d.
By Publication Account:						
To Bradbury & Evans (printing Journal)	290	15	8			
" Engravers, &c.	88	10	6	488	0	2
" House Expenses Account:						
Rent of Apartments	155	0	0			
Secretary's Salary	100	0	0			
Stationery and Printing	25	19	11			
Advertisements	2	6	0			
Law Expenses	2	2	0			
Carpenter	1	16	0			
Gas account, and due to late Secretary	3	10	9			
Repairs	2	2	0			
Bill Stamps and Sundries	0	10	6	263	7	2
" Library Account:						
Tables & Bell (for binding)	12	14	4			
Mr. Howe	4	9	7			
Purchase of books	1	11	0			
" Petty Cash Account:						
Messengers and Attendance	52	1	4	18	17	11
Paid for postage and delivery of Journal	31	15	4			
Cleaning, repairs, and sundries, &c.	6	17	6			
Coal, Carpenter, &c.	6	1	0			
Carriage of parcels, bookings, &c.	8	3	4			
Cabs, omnibus and portage	1	18	6			
Removal Expenses:				110	0	0
Paid Nixon, builder						
" Investment Account:						
Purchase of £220 Three per cents	88	14	5			
Balance in the Bank, 31st Dec. 1869	62	14	3			
" in hand, including Petty cash	151	8	8			
	£1280	14	3			

Audited and found correct, { SIBBALD DAVID SCOTT, } *Auditors.*
{ J. FULLER RUSSELL. }

Submitted to the General Annual Meeting, held in London, on the 15th of July, 1870, unanimously approved and passed.
(Signed) CHAS. S. GREAVES, *Chairman.*

Proceedings at Meetings of the Royal Archaeological Institute.

ANNUAL MEETING AT LEICESTER, 1870.

July 26 to August 2.

THE promised welcome of the Mayor and Corporation of Leicester to the Institute having been cordially seconded by the Leicestershire Archaeological and Architectural Society and the Leicester Literary and Philosophical Society, the Annual Meeting was opened in the Town Hall, formerly the Hall of the Guild of Corpus Christi. The President of the Institute, the Lord Talbot de Malahide, was also the President of the meeting, and, accompanied by Archdeacon Trollope, Archdeacon Stanton, Mr. G. T. Clark, Mr. Charles Tucker, and other leading members of the Institute, his Lordship was received in the Mayor's parlour by the Mayor of Leicester (George Stevenson, Esq.), Archdeacon Pearson, the principal members of the Corporation, and many of the neighbouring gentry. Shortly after two o'clock the company passed into the Hall, where the chair was taken by the Mayor, having on his right hand the Lord Talbot de Malahide, and on his left the Town Clerk.

THE MAYOR rose and said,—I open the proceedings of this interesting Meeting by calling on the Town Clerk to read the address of welcome to the Royal Archaeological Institute.

The Town Clerk (Samuel Stone, Esq.) then rose, and read the following address:—

“To the President and Members of the Royal Archaeological Institute of Great Britain and Ireland.

“We, the Mayor, Aldermen, and Burgesses of Leicester, beg to give you a hearty welcome to this ancient borough.

“We are sensible of the honour conferred upon this town by your having selected it for the place of the Annual Meeting of a Society distinguished by the rank and learning of its members, and the value and importance of the objects for which it is established.

“Although this County may not be so rich as some other districts in certain branches of antiquarian research, we are enabled to point to buildings, walls, and pavements in the borough which have withstood the ravages of centuries, and to treasures which enrich our local Museum, as affording important illustrations of the arts, the amusements, and the occupations of by-gone generations.

“We may refer to the Castle of Leicester, and the still more ancient Jewry Wall, as still exhibiting specimens of their original masonry; to

Roman pavements, columns, and milliære; to the venerable hall in which we are now assembled; to hospitals and churches; and to ancient charters and municipal documents possessing different degrees of attraction to the antiquary and the archaeologist; and to organic remains from the lias formation at Barrow-upon-Sear, replete with interest to the geologist.

"The ruins of our ancient Abbey will be visited, not only for their architectural, but their historic interest, as the closing scene of a troubled life, the hallowed spot where the great Cardinal—

"Gave his honours to the world again,
His blessed part to Heaven, and slept in peace.

"In the County of Leicester, your proposed excursion to Ashby-de-la-Zouch, to Kirby Muxloe, Ulverscroft Priory, Grace Dieu and Bradgate, will bring under your observation memorials of baronial greatness and monastic piety, and revive tender reminiscences of youthful beauty and ill-starred fortune. Your investigations will be agreeably relieved, and for a short time diversified by a visit to Beaumanor House, the beautiful seat of William Perry Herrick, Esq., and the acceptance of the hospitality kindly offered to the Institute by its much respected owner, will afford an opportunity for the gratification of modern, if not of antiquarian taste.

"We earnestly hope that your meeting at Leicester may be as agreeable to the Institute as it will be valuable to the Borough, and that it may tend to strengthen the taste for antiquarian research, and the desire of the inhabitants to preserve with the greatest care and vigilance every object which can throw light on the manners, the habits, the occupations, and the architecture of the former periods of our history, and render the Borough on a future visit a still more interesting field for archaeological investigation.

"GEO. STEVENSON (Mayor)."

THE MAYOR observed that he had little to add to the address which the Town Clerk had been good enough to prepare on behalf of the Corporation. He had been fortunate enough to attend the last monthly meeting of the Institute in London, and had heard a most interesting account of archaeological explorations in Rome by one of the members who would take an active part in discussing the Roman antiquities of Leicester. He was afraid that some members of the Institute would regret the small existing evidences of the Roman Rata, but he trusted they had catholicity of feeling and philosophy enough to know that in the advancing steps of commercial prosperity there was great danger that the vestiges of ancient objects would become obliterated. It must be some satisfaction, that though they may have lost some of the high refinements of Rome, civilized and modern Leicester had become more humane and Christian. It was a source of great satisfaction to the inhabitants that in the persons of their town-folk, Mr. James Thompson and Mr. W. Kelly, they possessed two gentlemen who had attained high rank as archaeologists; and as regarded the meeting which was about to commence, it was a great satisfaction to him that those gentlemen would co-operate most heartily with the Institute. He begged leave therefore, not only in the

formal language of the address which had been read, but personally, and on behalf of the inhabitants of Leicester, to say that there was a feeling of the heartiest welcome to the Institute on this occasion.

LORD TALBOT DE MALAHIDE, as President of the Royal Archaeological Institute, begged to offer his best thanks for the cordial reception which had been given to its members and to the visitors to the meeting, and for the very interesting address which the Corporation had done the Institute the honour of presenting to it. He regretted to say that he was a stranger to Leicester; that is, he had no personal knowledge of the many interesting objects which it contained, and it would be his duty to give place to those who were locally acquainted with them. In the address, an outline had been given of some of the more interesting objects in the County, and he trusted the consideration of those objects would form a part of the programme of the meeting. Allusion was made in the address to the difficulties with which a thriving and flourishing town like Leicester had to contend in order to preserve its antiquities. He fully agreed with that statement. But at the same time he thought the two objects might well be reconciled. It was perfectly possible for a flourishing town or city to follow the line of progress, which of course was inevitable, and which every well-wisher would desire to see it pursue, and at the same time not to disregard the mediæval remains of their forefathers, and the teachings which the study of those remains always afforded. It was very cheering to the members of the Institute to be received with cordiality and sympathy by the public bodies to whom the local government was entrusted. Such bodies had great influence, and could do much in aid of the objects the Institute had in view. And no public bodies nor individuals could boast of longer pedigrees than the ancient corporations of this country. Changes in their constitution were of course inevitable, and often desirable by the changes of time and circumstance; still they inherited the glories of the earlier bodies, and none would be anxious to disclaim their connection with the original corporations of the country. It was difficult to trace the origin of some of the earliest corporate bodies in England: traces of Roman polity might be found in some of them, which had been followed out and amplified in subsequent ages. At all events there was no question of their remote antiquity. And their antiquity was by no means their sole honour, for those who knew best their history knew they abounded with the recital of deeds of bravery, disinterestedness and charity. There was no more noble passage in the annals of many of those corporations than that relating to Simon de Montfort, Earl of Leicester, who, aided by other barons, and supported by the burgesses of Leicester and other rising towns, succeeded in laying the foundations of the British House of Commons.

MR. G. T. CLARK, after a brief allusion to the merits of Mr. Beresford Hope, whose usual task he had been called upon to undertake, said, "The President has acknowledged the cordial reception afforded to the Institute by the Mayor and Corporation of this ancient borough, and it now becomes my duty, following in his steps, to pay a similar acknowledgment to the landed gentry of the county. I am not surprised that we, whose business is with the past, should be welcomed by a body of men, an unusual proportion of whom have inherited ancient estates, and whose forefathers have achieved illustrations of various kinds. Thus

you have one family, who not only claim direct descent from the founder of the House of Austria, but possess the yet greater honour of having given birth to the author of "Tom Jones." At the other end of the county you have another family not only springing in male-descent from the early kings of France, but boasting among their cadets one of the greatest dramatists of England, and his very learned, though less celebrated brother, the Master of the Charterhouse. A third family, whose representative, I believe, offers us hospitality in one of our excursions, can number among its offshoots one of the sweetest poets of the period of the Restoration; still yet another family can point to distinctions of a character very different from those achieved by literature, but scarcely regarded with less general respect in the world—honours won in the field, and in the leading of the boldest and best of the regiments of the Commonwealth, when the country was arrayed against the king. No marvel then that a body which has numbered among its members a Fielding, a Beaumont, a Herrick or a Hazlerigge, should be desirous of preserving its connections with the past. Nor indeed are we likely to be in any degree in discord with so respectable a feeling. It is possible to be a devoted admirer of objects of antiquity and yet to be a Whig, and though a Tory to be a severe critic of the evidence in their behalf. Though conversant with castles and camps, arms and armour and the munitions of war, we are men of peace; and though deeply interested in cathedrals, churches, and monastic buildings, we avoid polemics, and never indulge in controversial theology. I may be permitted to hope that the good understanding with which we thus commence our visit will continue and even be augmented at its close."

The Ven. Archdeacon FEARON begged leave to offer a welcome to the Institute on the part of the clergy of the diocese, and of the Leicester Archaeological Society. It was a very great pleasure for him to have such a task committed to him. The study of archaeological antiquities had a humanizing and soothing effect. Sometimes they had the honour of meeting societies—such, for instance, as the Geological societies—who really did carry one so far back into antiquity—millions of years were quite trifles with them—that it was quite overwhelming to the mind to attempt to follow them. Then, in the meetings of Social Science Associations they made such rapid strides forward that to attempt to follow them was almost an equal fatigue to the mind. But the pursuits of an Archaeological Society had a tranquillizing and soothing effect, approaching to calm and repose. Archaeological discussions were within the historic period, and he was thankful it was so. Certainly within the historic period there was much of interest in and around Leicester. Perhaps the Institute could tell something more than they already knew about their pedigree;—how they came to be makers of hose and elastic webs; what sort of people their ancestors were; and by what title they held the rich valley of the Soar. Leicester figured conspicuously in the great battle which terminated the Wars of the Roses, and perhaps they should hear some fresh particulars about King Richard III. Mr. Froude had beaten down so many of their old beliefs without mercy, that perhaps much that had been accepted as undoubted about Richard III. could be shown to be quite uncertain, if not false. At Leicester they would at all events see the bridge over which Richard pressed to fight the battle of Bosworth; and at Beaumaris they would

see the bed on which he had slept the night before the battle. He could assure the Institute they would do the best they could to make themselves as ancient as they possibly could, which was not the usual way of winning hearts, and they would do all they could to interest them in their county and town.

The Rev. D. J. VAUGHAN, in supporting Archdeacon Fearon, begged leave to add a few words of hearty welcome to the distinguished Society which had come among them. Those words would be but few, as he confessed one's interests were just then looking forward rather than backward, and the sound of the awful war which was so near them was such that he was hardly prepared to go back into the past. He concurred in giving a hearty welcome to the Society.

The Ven. Archdeacon TROLLOPE acknowledged with thanks the welcome of the clergy of the diocese, and of the Leicester Archaeological Society. The very kind terms in which the representatives of those important bodies had expressed themselves much lightened the difficulties with which he had to contend, and he felt sure that if they now met on happy terms, they would part on still happier terms. He felt certain that their investigations would not fail to please all who were in any way interested in the mighty history of the past.

The Rev. R. HARLEY, as President of the Leicester Literary and Philosophical Society, begged to join in the welcome accorded to the Institute. He continued : "We are quite sure that your visit will be of great service to us, and we trust and believe that it will not be without advantage to yourselves. Although we are not professedly an archaeological society, yet we are always glad to receive communications on archaeological subjects. We are interested not only in the progress of the arts and sciences, but also in the researches of the antiquary and the scholar. We may not all become archaeologists, but we shall look with new interest upon familiar objects and places, when we are able to connect them in thought with important events in our local history, or in the history of our race. It is sometimes objected to the researches of the antiquary that they are of no practical value. And it must be acknowledged, I think, that there is often a great deal of trifling curiosity about things of no moment, and that many a vain attempt has been made to reconstruct a living form out of those dry bones of antiquity from which the breath of life has fled for ever. But it surely cannot be contended that all researches into the past are vain. On the contrary, the results of such inquiries as those pursued by the members of this Institute often throw light on problems of deep historic moment. Things are not valuable merely because they are old and rare ; but the interest which gathers around the relics of bygone ages is always legitimate when it springs from what has been called "a sense of the fellowship of humanity. We are connected by indissoluble bonds with the past. We are what we are, and where we are, because others have gone before us. They laboured, and we have entered into their labours. We are the trustees of the future. It is thus that the spirit of past generations throbs in us, and down through posterity it shall continue to flow, and be the moral life-blood of the men who are to be. It therefore becomes us to keep alive the memory of bygone times, and to connect the remains and relics of antiquity with the history of our country and the history of our race."

The Rev. J. SPITAL supported Mr. Harley in a few words.

Sir Thomas E. WINNINGTON, Bart., on the part of the Council of the Institute, expressed his thanks for the welcome accorded by the local societies.

The Rev. E. HILL then detailed the route of the perambulation of the town which was about to be made, and after a vote of thanks to the chairman the meeting broke up.

Mr. J. H. PARKER said a few words, drawing attention to the Hall in which the meeting had been held. It was the old Hall of the Corpus Christi Guild. The guilds of Leicester could be traced back perhaps further than those of any other town in England, and some of their records of the twelfth century were still existing. The Guild of Corpus Christi was founded in the reign of Edward III., and the present hall was probably built in the reign of Henry VI., but it had been much altered in that of Elizabeth.

Passing out of the Guildhall, the hospital of William de Wiggestone was close at hand. The company assembled in the chapel, and Mr. PARKER, from the pulpit, spoke of the general arrangements of the establishment as a hospital, founded in the reign of Henry VIII. The documents relating to its foundation were still existing, the arrangements as originally devised and used were continued till a very recent period, when a new establishment had been built a short distance from the town, in which the founder's intentions were carried out on a scale in proportion to the increased value of the property. It was intended for old and infirm people who, if they could not go out, could participate in the religious services, and see the elevation of the host. There was no reason for destroying such a building merely because the original establishment had grown so much that it had moved a short distance. The details of the building were very well worthy of preservation, and could easily be preserved. He trusted some appropriate use would be found for it.

The company then passed on to the church of St. Martin, a noble structure, but which had been lately thoroughly restored. Mr. Parker drew special attention to one of the chapels, which had belonged to the Guild of Corpus Christi, and was of the thirteenth century. Another chapel, dedicated to St. Catherine, and now known as Mr. Herrick's chapel, was a good example of the chantry chapels erected by families in which masses were said for the souls of their kindred.

St. Nicholas' Church then claimed the attention of the party. It was chiefly remarkable for the eleventh century tower, and the general features of the structure approached nearly to the early Norman type. One of the aisles had been destroyed. Roman bricks might be seen worked into various parts of the building, chiefly the tower, and these had doubtless been taken from the "Jewry Wall," against which the church had almost been built.

With regard to the *Jewry Wall*, Mr. JAMES THOMPSON stated the general facts in its history. In mediæval times the Jews, who were very numerous in Leicester, were forced to live in that portion of the town, which was by no means the most eligible, apart from the Christians, and from that circumstance the block of building had taken its name. The structure was undoubtedly of Roman construction. The level of the ground had been raised fourteen or fifteen feet. Referring to an illustration in Stukeley, and discussing the probabilities of its earlier use,

Mr. Thompson thought it was the western gateway of the Roman *Rate*. The existing fragment was only the inner core of the structure, which had doubtless been faced with stone. The Rev. J. G. JOYCE thought the Jewry Wall was the remains of the west gate of the city, and stated the grounds for his coming to that conclusion. Mr. PARKER said that the foundation of the wall is of the time of Constantine, or perhaps of Maxentius, that is, of the end of the third or the beginning of the fourth century of the Christian era. But there is not enough remaining visible to be able to form any decided opinion as to what the building has been. The exterior of the wall is entirely concealed by a modern factory which has been built up against it, so that we only know what it was like from Stukeley's engraving. He could not see any resemblance to a Roman city gate, and he inquired in vain for any remains of Roman paved roads leading up to the supposed gate; usually four roads met at a gate, two on either side. The excavations made in anticipation of the Meeting showed that the present level of the ground, with the sills of the two arches, is more than fourteen feet above the original level; the men had got to that depth and had not got to the bottom. They found the soil all made-earth and rubbish. No one can tell with any certainty what the building had been, without having it cleared out to the foundation. The adjoining church of St. Nicholas is a construction of the eleventh century, built out of Roman materials taken from the older building, and one half of it may have been pulled down at that time. Unless it can be shown that the two arches are on the level of the Roman roads, they cannot have been gates. It seems more probable that the roads were at the level of the old foss-ways, from fifteen to twenty feet below the level of the soil, and that the building stood on the bank by the side of the foss-way or hollow-way. The present remains are just as likely to have been a basilica for a market-hall or corn-exchange, as of a city gate, but there is not enough remaining visible to give any positive opinion.¹

Mr. BLOXAM said that from the representation of niches in Stukeley's engraving it had been thought the wall had been a part of a temple,—perhaps of Janus.

The perambulation was continued to the churches of All Saints and St. Margaret, where Mr. PARKER, Mr. BLOXAM, and Archdeacon TROLLORE drew attention to their special characteristics. In the church of St. Margaret Mr. Parker remarked upon its extensive restoration, which rendered it difficult to point out the original structure, and Mr. Bloxam

¹ The only ground alleged for not at once recognizing this masonry as a city gate, was that on opening below the sills there was exposed a depth of stone wall of from 12 to 15 feet. The explanation was subsequently given by the Rev. J. G. Joyce. In fortified cities, if completely surrounded by a fosse, the access to the gates must have been over a drawbridge. To one approaching such a gateway from the outside, the city wall would show itself completely, from the summit of its ramparts down to the water in the fosse. Where the gateway was made the wall would appear both above and below it. The drawbridge would stand even with

the gate-sill, and there would be visible below the level of the bridge all that depth of wall underneath which would be between the sill and the bottom of the fosse, if the latter were empty. This piece of stone-work, which was in truth the revetment of the ditch below the gate-floor, was opened on its inner side, and disclosed of course a depth of 12 to 15 feet of masonry *under the sill*. The Roman streets contiguous have furnished paved floors of houses at a depth very nearly, or quite, of the same level as these sills, showing what was about the street level. This circumstance may remove all reasonable doubt.

discoursed upon the sepulchral effigy of Bishop Penny, the only episcopal effigy in the county.

An evening meeting of the Historical Section was held in the Masonic Hall, Halford Street, at 8.30 p.m., the Ven. Archdeacon Trollope in the chair.

The Rev. J. GERALD JOYCE, F.S.A., read a memoir "On the Stained Glass in Fairford Church, Gloucester." This was illustrative of the series of cartoons exhibited in the temporary Museum of the Institute, and which had been executed by the author at the order of the President of the Committee of Council on Education, for the purpose of being deposited in the South Kensington Museum for the use of students. The cartoons are traced drawings, colored on the spot, made from the windows themselves. These windows had excited no inconsiderable amount of controversy, and the opportunity of exhibiting such faithful copies of them was too good to be lost. Mr. Joyce commenced by speaking of the history of the church, and the tradition respecting the glass having been captured at sea.² Upon this point he drew attention to a treaty (printed in Rymer's *Fœdera*) in the 11th year of Henry VII. relating to piracies. The windows are twenty-eight in number, and are in a somewhat perilous condition, the lead-work being generally in a very decayed state; and they have sustained injury from a variety of causes. The windows are not put together in small pieces, as generally supposed; some of the pieces being extremely large, and consequently more liable to fracture. Several of these pieces are cracked across, and are in great danger from any violent wind. There is a local story that the glass was at one time buried, and subsequently not well replaced. In some instances the wrong face of the glass has been placed towards the outside. The subjects comprise many great events in sacred history, from the Temptation in Paradise to the Judgment Day, including a series of the prophets, and representations of the chief events in the lives of the Virgin Mary and our Saviour. The pedestals, canopies, pillars, and draperies, and the diaper work generally are strongly mediæval in artistic character; but in the instance of one diaper stencilled on the grounds, some faint approach to Renaissance Art may be detected. The windows in the church of Hirschau gave a representation of somewhat similar subjects, and approach nearly in date to those at Fairford.

Mr. Joyce discussed various art traditions, by which the treatment of many sacred subjects had been handed down unaltered through centuries. As an example he cited the representation of Christ's entry into Jerusalem in the Fairford glass as presenting precisely the same treatment of details as appeared on a sculptured Roman sarcophagus of the sixth century. On the question of authorship, Mr. Joyce thought the evidence was very full and strong that neither the design nor the execution of the Fairford glass appeared to belong to one and the same person. This position was maintained by a careful comparison of various parts; and as regards Albert Durer, by a reference to some of the leading characteristics of his treatment of various subjects, the writer feeling convinced that it was impossible for an artist to assign the Fairford glass to Durer's hand.

² See *Arch. Journ.*, vol. xxv. p. 119, for a Memoir on the Fairford Windows, by the Rev. J. Fuller Russell, and p. 122,

Mediæval Art and the Fairford Windows, by Mr. J. G. Waller.

MR. G. T. CLARK and MR. MACKIE made some comments upon this interesting communication, and in commendation of the drawings exhibited by Mr. Joyce.

A vote of thanks having been cordially passed to Mr. Joyce, Mr. J. THOMPSON read a memoir on "The Jews and the Jewry Wall," in which he brought forward some curious documentary evidence relating to the Jews of Leicester from among the muniments of the town. The Chairman having made some remarks upon the memoir, a vote of thanks was passed to the lecturer, and the meeting adjourned.

Wednesday, July 27.

The Section of Antiquities met in the Masonic Hall at 10.30 A.M., when the President of the Institute, Lord Talbot de Malahide, occupied the chair.

The Ven. Archdeacon TROLLOPE, President of the Section, read an inaugural address. Commencing by a reference to the changes made in the pursuit of archaeological investigations by the action of such bodies as the Archaeological Institute, the writer accounted for it by remarking that in earlier times antiquaries were generally seeking for something startling, rather than contenting themselves by conducting a series of patient inquiries. Still there had always been some earnest workers and many careful collectors. It was however only within the present century that we had distinct and accurate knowledge of the appearance and habits of our once Roman masters in Britain, of their houses, weapons, dress, and works of art, or of the arms with which the British tribes sought to protect themselves against their more disciplined invaders. Opportunities of gaining knowledge on this head had often been lost through want of interest in the treasures widely consigned to the safe keeping of mother earth. Of these lost opportunities several were stated that had come to the writer's knowledge. After referring to the great variety of subjects affected by archaeological pursuits, and the value and interest of such studies, the writer expatiated on the advantages afforded by the Institute for their careful prosecution, and the benefits of such gatherings as the present.

A vote of thanks having been passed to the Venerable Archdeacon, the Rev. J. G. JOYCE gave a discourse on Leicester under the Romans. Being especially adapted for such an inquiry by his long-continued and careful investigations of one of the most remarkable Roman settlements in this country, Silchester in Hampshire, the lecturer commenced by remarks upon the general principles followed by that great people in making permanent settlements. Roman Leicester appeared to have formed nearly a parallelogram, and that shape was of some interest, as it showed that the site had been previously occupied. Certainly there were four gates to *Ratae*, and the question of the Jewry Wall being one of those gates was again discussed, the lecturer inclining to think it was the west gate. Of the position of the Forum he thought there could be no doubt, some pillars *in situ* and other details having been found at the corner of St. Nicholas Street. Between two of those pillars was a channel for the passage of water. The villas appear to have been on the western side of the town. In the Town Museum are numerous remains of the Roman period, and Mr. Joyce drew special attention to several of these

objects. An outline map of the town was exhibited, on which all the places where Roman remains had been found were plainly marked.

Archdeacon TROLLOPE, in reference to the supposition that water passed through the Forum, had no doubt that water was then driven into the higher parts of the town by force pumps.

Mr. THOMPSON had listened with great pleasure to the address of Mr. Joyce, and had remarked how difficult it was to find traces of Roman Leicester, owing to its subsequent occupation by other conquerors, and by its present busy population. As to the Jewry Wall it seemed to be conceded that it was the western entrance to Leicester. After alluding to the "Milliarium" found in the neighbourhood, and the extent of made earth in the town, Mr. Thompson spoke of the many discoveries of pipes, and the supply of water. After further remarks by the PRESIDENT, Archdeacon TROLLOPE, Mr. PARKER, and others, a cordial vote of thanks was accorded to Mr. Joyce.

Mr. BURTT read a memoir entitled, "New Particulars respecting the Abbey of Leicester." This was founded upon documents in the Public Record Office, the principal of which, relating to the condition of the site of the Abbey shortly after the Dissolution, has been already given (p. 204). The other document was a letter of the last abbot, John Bonchier, which was of some interest as illustrating the condition of the monastic establishment during the latter days of its existence.

Mr. NEVINSON and Mr. THOMPSON expressed their regrets that the document now brought to light had lain hid so long, as great trouble and expense would have been saved if the investigations carried on upon the site of the Abbey ruins had been aided by so good a guide. The results which had been arrived at in these examinations of the site having been discussed, a vote of thanks was passed to Mr. Burtt, and the meeting adjourned to the evening.

At 1.30 P.M. a large party assembled at the Castle. The Right Hon. Lord Berners, Constable of the Castle, and one of the patrons of the meeting, was prevented by illness from receiving Lord Talbot de Malahide and the Institute; the duty therefore devolved upon Mr. W. Napier Reeve as his lordship's deputy. The Duchy Court having been proclaimed and opened in due form, Mr. REEVE proceeded to deal with the memories of the place. The alleged foundation of the Castle by Ethelfreda, the daughter of Ælfred, was touched upon, and then the succession of the Norman earls. The history of the Castle was continued till the earldom of Lancaster became merged in the crown of England, and the warrant was produced by which the keeping of the Castle was confided to the Constable. Mr. Reeve then narrated, to the amusement of the audience and of the corporation officials who were present, the ceremony performed on the Monday after the election of the Mayor, when the Constable of the Castle was for five minutes the greatest man in Leicester, seeing that the chief magistrate of the borough stands before him while the Constable or his deputy sits and receives his oath never to infringe on the privileges of the Castle. Striking the desk with the *bâton* of the Constable made from one of the oaken pillars of the hall of the Norman Castle, Mr. Reeve adjourned the court.

The Rev. H. J. HOSKYNs, in the absence of Sir Frederick Fowke, took his seat as Deputy Chairman of the Justices of the county, and in a few appropriate words welcomed Lord Talbot to the county of Leicester.

Mr. G. T. CLARK then made the following observations upon the architecture of the castle. The Hall, though much mutilated, preserves its original aspect, and much of the Norman wall. Though late in the style, it is much earlier than the Halls of Oakham and Winchester castle, but resembles them, especially the former, in plan, having a nave of about 25 ft. in breadth by 60 ft. in length, and two narrow aisles. The nave lies north and south, and the south wall is quite original, and pierced by two round-headed windows, with flanking detached slender octagonal columns, and the head of each recess surrounded by a single band of bold chevron moulding. These rest upon a plain chamfered string-course. Near the head of the gable is a third and small window, also round-headed but plain. Below is a Norman door, in its present condition modern, but probably replacing an original doorway of the same pattern and dimensions leading to the kitchen. The wall at the north end is pierced by a single round-headed window, probably quite modern, but the base of the wall is original. This nave was divided from the aisle by a range of oak posts or piers, with Norman carved capitals. These remained in part till very recently, and from one of them was cut the bâton used by the present Constable, and designed by Mr. Reeve, his deputy. The wall of the west aisle contains one of a range of original windows, flat-pointed, with plain jambs and a single chevron band round the head. The rest of this wall has been patched with brick, but the base is old, and at the north end is what looks like a decorated buttress. The east aisle is either wholly new or cased in brick, except the north end, which seems in part old and to preserve one jamb of an original window. The proportions of this aisle show its plan to be clearly original. This fine building has been so disfigured by the fittings of the modern law courts that its character is quite destroyed. These ought to be cleared away, and the hall allowed to appear as a good example of late Norman domestic work. In front of the hall, in the centre of the inner ward, the ground rises as a low mound, and here were found lately two skeletons laid out, headless, the heads placed on their breasts. Probably, therefore, here was the place of execution of those condemned in the hall. At the south end of the hall were the kitchens, only of late years removed, and below their site is a very fine vault, 40 or 50 ft. long and 12 or 14 ft. broad, the west wall of which is the outer wall of the castle and probably Norman. The vault itself is of excellent ashlar, and slightly four-centred, being evidently perpendicular work, no doubt due to the Plantagenet earls, who are known to have built or restored the kitchens. Steps, now walled up, lead from this vault up into the hall, and another door at the south end led probably into the vaults extending towards the mound. This was evidently a cellar, and a very fine one, worthy to be named with those at Tutbury.

Proceeding to the Castle Mount, Mr. Clark continued his discourse upon the architecture and general construction of the castle, which during a progress round its precincts, he accomplished somewhat in the following manner:—The Castle of Leicester is placed at the south-west angle of the rectangular Roman enclosure of the town of Rata, and upon the right bank of the Soar. Whether this enclosure was completed along the west front, upon the line of the present Jewry Wall, and thus included the site of the Castle, or whether, as was the more usual arrangement, it was left open along the river front, are questions still disputed, but

in the latter case the position would be analogous to those of Tamworth, of Wallingford, of Wareham, of Cardiff, and of several other places, where a rectangular enclosure rests upon a river, upon the bank of which are placed a mound and other remains by no means of a Roman character. The position of Leicester is such as would be naturally selected by any early tribe, and would be still less likely to be overlooked by those who laid out the Great Fosseway from Vennones or High Cross to Lindum or Lincoln, which would naturally pass through the low marshy valley by which the Soar passes between the higher lands of Braunstone on the west and of the site of Leicester on the east. The position is further strengthened by the winding course of the Soar, which covers Leicester to some extent on both north and south. On the east a defence, also natural, is afforded by the brook, which having risen in Stoughton village, passes between Crown and Spinney hills to Humberston bridge, and thence, as the Willow Brook, covers the north front of Leicester to the Soar. These circumstances indicate the site of Leicester as proper for a central camp, and afterwards a city, but whether this discovery is due to the Romans or had been previously made by the Britons, is doubtful. The name *Ratie* does not seem to be wholly Roman, any more than *Lindum* or *Londinum*, and may be allied to *Ratcliffe* or *Ratby* in the same district, at which latter place is a large camp, though whether of British or Roman outline it is difficult from the Ordnance map alone to determine. By whosoever founded, the city of *Ratie*, as known by its remains, is Roman, rectangular in outline, traversed by two main ways at right angles, and thickly studded, both within and without the line of the walls, by Roman remains. The Castle, however, the citadel of the place, is certainly not Roman. Its site is marked, not only by a fine church and a tolerably perfect Norman hall, but by a mound or motte such as is found in the same relative position as regards the Roman works and the river at Tamworth, Wareham, Wallingford, and Cardiff. Upon the retirement of the Romans *Ratie* became, under the name of Leicester or *Leyrester*, a town of great importance under the Saxons, and was nearly in the middle of the kingdom of Mercia. Its name occurs in a charter of 819, and it gave the title of Earl to a succession of Saxon Thanes, ending with Edwin, slain in 1071. During the Danish occupation it was one of the five burghs, and soon after the Norman Conquest it fell into the hands of Hugh de Grantsmaisel, who held a castle upon a similar mound at Hinkley, not far distant. There is no direct evidence of the origin of either this or the Hinkley mound, but those of Tamworth and Tutbury were certainly thrown up by the Saxon Princess Ethelfleda in 913-14, and to that century, if not actually to that date, may safely be referred the mound of Leicester. The Norman castle, of which the hall and church remain, was no doubt the work of Robert Bellomont about 1103. The fortifications, with those of the town, were razed after the well-known siege by Henry II. in 1175, and probably to some extent restored, if not by *Bohun*, *Blanchmains*, or *Fitzparnell*, successive earls, then by the Plantagenet earls, founders of the Newarke, and lords of this and many other castles and honours. The castle stands at the south-west angle of the old town, close to, and about 20 ft. above the level of the Soar, the three channels of which unite a little lower down. The nearest to the castle is an artificial leat, supplying the castle mill, represented by a modern structure a little above the west bridge. The general position as

regards the river and mill closely resembles that of the Saxo-Norman castle of Taunton on the Tone. The fortress was composed of the mound upon its south-eastern quarter, the hall and kitchens upon its western or river front, the castle house and buildings to the north-west, two gate-houses on the north-east and south-east, and between them a wall, upon which was the chapel, now the church, of St. Mary de Castro. The court thus enclosed was the main ward. If originally, as is probable, there was an outer ward, it lay to the east and south, and included the eastern end of the chapel and the present Newarke. The mound in its present state is about 30 ft. high and 100 ft. in diameter upon its circular and level summit. It was, however, about as high again, having been lowered some fifty years ago, and converted, like Bedford mound, into a bowling-green. It contains a well of some depth, the water of which is copious and good. There are no traces of buildings upon, or of a ditch around the mound, but connected with its east side are some stones, possibly part of a wall, and outside it is a wall of enceinte of a very substantial character, though whether Norman or later Plantagenet work is hard to determine, but more probably the latter. As there is no trace of or evidence for a regular rectangular Norman keep on the lower ground, it is probable that upon this mound was a shell keep, the last traces of which would necessarily be removed when the mound was lowered. The castle house and buildings probably stood on the north of the hall, on ground now occupied by a modern house and garden. In the latter is seen the line of the old wall, marked by a step of about 8 ft. in the soil, beyond which, towards the mill, was the ditch. This wall seems to have branched, one part abutting upon the upper gate-house, now a Tudor building of timber framework, and the other probably including a barbican or outer gate, beyond which it joined the existing wall of the churchyard, and finally abutted upon the lower gateway. The lower gateway, now in ruins, is an early perpendicular building, verging on the Decorated, having an outer portcullis, and from it springs the wall, which at present includes the mound and extends nearly to the river. Between and upon the line of the wall of the inner ward, connecting the two gateways, is placed the castle chapel. Though this has been augmented in the Early English and Decorated periods into a very large church, it was always a considerable building. In the west end of its north aisle is the original Norman door which opened from the castle ward into the building. St. Mary's de Castro is certainly in its present condition one of the finest castle chapels in England, and even originally, in the Norman times, the building was evidently very considerable. The Newarke, though in fact an outer ward to the castle, and covering it towards the town and the south, is an addition, and its great gateway, attributed to John of Gaunt, but certainly of later date, more resembles the gateway of a palace or ecclesiastical building than of a castle. When, in the 17th century, the town was included on its three open sides by a regular fortification, one of the three great hornworks was placed so as to cover the castle and the south gate of the town. It was, however, on this side that the town wall was breached by a battery on the Raw Dykes, and the breaches entered by push of pike, and the town taken by Prince Rupert.

Upon arriving at St. Mary's Church, Mr. PARKER supplemented Mr. Clark's comments by remarks upon the architecture, in which there are some excellent details. The great length of the building was, he thought

accounted for by its being divided into portions for the garrison and persons connected with the castle. The west end might be considered to be of about the year 1100. There was much mixture of style in the church, and some rather singular instances of haste in making the changes which had from time to time taken place.

The Trinity Hospital was next visited. It is an establishment similar in character to that founded by William de Wiggston, but much earlier, having been established by Henry, Earl of Lancaster, about A.D. 1330. The lancet windows in the east end of the chapel were the earliest portions remaining of any architectural character, but the building had undergone so many alterations that little of the original structure existed. Some armour, probably of the 15th century, was preserved in the chapel, doubtless belonging to some one buried within the precincts. An object of domestic use, in the shape of a large grater, of the Elizabethan period, was shown to the visitors. Around the frame is the inscription—

On the lid in Roman capitals :

“ ANNO · REGNI · REGINÆ · ELIZABETH · ANGLIA · ”

On the front :

“ FLEE · IDILNES · AND · BE · WEL · OCCUPIED · 1579 · ”

On the bottom :

“ 1579. ”

“ THIS · BELONGITH · TO · THE · OLDE · OSPITALL ·
IN LEICESTER. ”

On the back :

“ THINKE · WEL · AND · SAY · WEL · HVT · RATHER ·
DO WELL. ”

Vehicles being in readiness, the party then proceeded to visit the site of the Abbey of St. Mary de Pratis, known as Leicester Abbey. A high wall surrounds the enclosure, and in the centre are some high and massive ruins of an Elizabethan mansion. No remains of the Abbey are visible, and the land being in the occupation of a gardener, excavations had been few and costly. Mr. G. H. Nevinson explained where the recent excavations had been made, but very little progress appeared to have been made in assigning the places occupied by the church and other parts of the monastic establishment. Shortly afterwards the party returned to Leicester.

At 8.30 P.M. a meeting of the Historical Section was held in the Masonic Hall. Archdeacon STANTON presided, in the absence of Lord NERVES, who was prevented attending by the war.

Mr. J. T. BURGESS, of Leamington, read a memoir “ On the last battle of the Wars of the Roses,” better known as the Battle of Bosworth. This was illustrated by several maps and views of the actual site of the encounter and of the neighbouring country. The writer reviewed the historic facts in connection with the battle, and made several original suggestions as to several circumstances by which the events had been influenced, and as to the actual struggle itself.

After a vote of thanks to Mr. Burgess, the meeting adjourned.

Thursday, July 28.

At 9 A.M. the excursionists mustered strongly for the visit to Ashby-de-la-Zouch, Tutbury, and Tamworth. At starting the route lay through

some of the rich pasture lands of the county, and it was afterwards diversified by very varied and pleasing scenery. Arrived at Ashby-de-la-Zouch, a general survey was made of the interesting ruins, and the remains of the noble gate-house, the chapel, the hall, and the kitchen, with its many and handy contrivances and arrangements still apparent, attracted great interest and attention. Mr. Clark, Mr. Parker, and Mr. Bloxam discoursed in various parts of the ruins, and touched upon the history of their occupiers and the probabilities of some portions being earlier in date than the general bulk of the remains. Passing somewhat hurriedly through the adjoining church to see the remarkable effigy of a pilgrim wearing a collar of SS., and the monuments in the chancel, the route was continued to Tutbury. Here the fine church has a western doorway of late Norman work, which attracted much attention, and Mr. Parker duly discoursed upon it and other portions of the very interesting structure. Proceeding to the ruins of the castle, Mr. Clark assumed the lead, and led the way round the outer wall to the entrance-gate, pointing out any points of interest *en route*. The natural strength of the position had been increased by the skill of the builder of the castle, who led the approach to the entrance through a gorge between hills in front of a strong tower, and before a considerable space of curtain wall. On arriving at the mound once occupied by the keep, Mr. Clark gave a vivid description of the locality at the period of the erection of the fortress, and of its chief occupiers and defenders.

Progress was then made towards Tamworth. It had been the intention of the Institute to visit the interesting church of Polesworth, but at the last moment, after many arrangements had been made, the railway negotiations failed, and that part of the excursion was struck out. On arriving at Tamworth an excellent lunch was served at the Castle Hotel. The castle itself was then visited. The remains of this stronghold, so renowned in early times, had been greatly altered to suit the exigencies of modern residence, and beyond its grand position and outline little of the early fortress was to be seen. There were, however, some interesting portions of the structure worked up into the Jacobean residence, and to these Mr. Clark drew careful attention, and did all due honour. The church was the next point of interest. This was found to be in the hands of the restorers, and several of the original and most interesting features of the fabric were laid bare, and could be carefully examined. Mr. Parker and Mr. Bloxam here discoursed upon the church and its monuments. The party then returned to Leicester.

In the evening a *Conversazione* was given by the Mayor of Leicester in the Town Museum, at which the attendance was very numerous, as many were present by private invitation. A temporary *buffet* was erected, which was provided with a handsome display of refreshments of all kinds which seemed to be greatly enjoyed; an excellent band played a good selection of music, and a most agreeable evening was passed in wandering among the collection of local antiquities which is of great value, and the large and well-arranged Natural History collections.

Friday, July 29.

At 9 A.M. the general meeting of members of the Institute was held in the Town Library, at which Lord Talbot de Malahide took the chair. Mr. Burt (Hon. Sec.) read the balance-sheet for the past year (see p. 324).

Its adoption was moved by the Rev. E. Hill; seconded by the Rev. J. Lee Warner, and carried unanimously.

Mr. C. Tucker (*Hon. Sec.*) then read the Annual Report.

"In presenting their Annual Report the Council are able to refer with gratification to the satisfactory state of the finances of the Institute. At the close of the year 1869 a balance remained to the credit of the Institute larger than the cost of the one number of the journal which was then in the course of preparation and due to the subscribers for that year.

"The Council may refer with feelings of great satisfaction to the progress of the study of Archaeological science. On more than one occasion the interest of the monthly meetings of the Institute has been enhanced by the discussion of one of the most important and interesting discoveries—in an antiquarian sense of modern times—that of the Roman sarcophagus found within the precincts of the Abbey of Westminster. Memoirs are in preparation in connection with that remarkable monument, which will place before the readers of the journal of the Institute not only the able discourses of the Very Rev. Dean Stanley and the Rev. Mr. Joyce, but also the careful results of an examination of the subject by distinguished antiquaries in various parts of the world. The series of carefully conducted investigations into the habits and customs of some of the earliest settlers in our island has also been continued with patient research and enlightened skill by the Hon. Mr. Owen Stanley. The Council refer with grateful appreciation to the excellent memoirs which have appeared in the journal of the Institute in elucidation of this subject, and they desire to be permitted to express their most hearty thanks to the author for the numerous and very handsome illustrations presented by him to accompany the letter-press.

"In the North of England the progress of antiquarian research has been productive of highly interesting and important results. The first fasciculus of the inscriptions and sculptures of the Roman Wall, illustrated and collected through the munificence of Algernon, Duke of Northumberland, has been produced under the careful and learned editorship of Dr. Collingwood Bruce. In close connection with this publication may be noticed the remarkable discovery of a large number of inscribed Roman altar-stones in the immediate vicinity of the Wall of Hadrian.

"Your Committee hail with feelings of great satisfaction the rapid increase of interest in the subject of prehistoric antiquity, which now pervades so many institutions devoted to the study of the past. Among the literature of that section of antiquities the completion of the important volume of the Transactions of the International Prehistoric Assembly at Norwich may be noticed as a very valuable accession to archaeological literature which has been issued since the last annual meeting of the Institute. The transactions of the very successful meeting of the Prehistoric Congress at Copenhagen last autumn, the valuable results of which were brought before the Institute by General Lefroy, are in the press. And the meeting of a similar Congress proposed to be held at Bologna in the ensuing autumn presents an unusual amount of attraction to the antiquary. The Catalogue Raisonné of the Christy collection is in forward progress under the auspices of Mr. Franks, by whose indefatigable exertions that great collection has been largely enriched. Mr. Franks has also been enabled greatly to add to the riches of the remarkable Blackmore Museum at Salisbury, under the charge of Mr. E. T.

Stevens, who has published a valuable handbook based on that magnificent collection of the Prehistoric antiquities of all countries.

"In concluding their report the Committee have to advert to the losses in their ranks since the last annual meeting. Among the principal of those who are no longer engaged with them in the prosecution of archaeological knowledge may be mentioned—

Sir Charles G. Young, Garter King-at-Arms, an earnest friend and member in early times.

Henry Chester, Esq., a member for many years, who was lost on the Alps.

B. B. Woodward, Esq., Her Majesty's Librarian. He was for some years on the Council of the Institute, and constantly rendered essential service in carrying out the gracious permission of Her Majesty and the lamented Prince Consort in enriching the exhibitions of the Institute with precious objects of art from the Royal collections.

The Rev. F. Warre, Hon. Sec. of the Somerset Archaeological Society. He was for many years a member, and at one period was a frequent correspondent and exhibitor.

John Bruce, Esq. He was a frequent and cordial auxiliary in the earlier times of the Institute; and contributed a most interesting memoir to the Bury meeting last year, not many months before his lamented death.

The Rev. T. Collins, of Knaresborough. He was a constant friend and member, and attendant at our annual meetings.

W. H. Blaauw, Esq. He was long a member of Council, and was present at every annual and other meeting for many years, and mainly contributed by his most friendly exertions to enhance the interest and ensure the success of the Chichester Congress of the Institute.

Sir Edmund Antrobus, Bart. He had been long a member, and received the Institute most hospitably at his seat at Amesbury on the occasion of the Salisbury meeting.

Frederick Pearson, Esq. He was an early friend of the Institute; was a member for many years till his decease, and frequently attended the meetings.

W. Binley Dickenson, Esq. A diligent numismatist, and long a member of the Institute. He lived latterly at Leamington, and entered warmly into the business of the Warwick meeting, which he ably supported.

Sir James Simpson, Bart. Was one of the most eminent of Scottish antiquaries; was long a member of the Institute, and promoted heartily the very successful meeting held at Edinburgh.

C. Durnford Greenway, Esq. An able, pleasant, and most cordial supporter of the Warwick meeting, since which he had continued a member.

J. E. W. Rolls, Esq., of the Hendre, Monmouth. An old member and good friend.

Mr. Evans, our printer, whose obliging good will and abilities in business often ensured facilities in the publication of the journal of the Institute much to our advantage.

"The Council earnestly impress upon the attention of members the necessity of their strenuous exertions to replace those who have thus been lost to the Institute, by inducing others to join as new members.

"The following list of members of the Central Committee retiring in annual course, and of members of the Institute recommended to fill the vacancies is submitted to the meeting.

"To retire : *One Vice-President*, Albert Way, Esq.

Six members of the Central Committee : The Rev. J. Beck, A. J. B. Beresford Hope, Esq., M.P. ; A. W. Franks, Esq. ; the Rev. J. R. Green ; Sir Joshua Rowe, C.B. ; R. H. Soden Smith, Esq.

Auditor : Sir Sibbald Scott, Bart.

"The following are recommended to fill the vacant posts :—

Vice-President : Sir William Tite, M.P., F.S.A.

Central Committee : The Earl Amherst, the Lord Zouche, the Rev. J. B. Deane, Sir Sibbald D. Scott, Bart., J. W. Bernhard Smith, Esq., Albert Way, Esq.

Auditor : J. Maclean, Esq., F.S.A."

Fairless Barber, Esq., moved the adoption of the Report ; this was seconded by Archdeacon Stanton, and carried unanimously.

The consideration of the place of meeting for 1871 was then entered upon.

Mr. BURTT read an invitation from the Corporation of Southampton, a place which had many recommendations for the meeting, and adverted to the claims of Cardiff or Swansea among other places of interest for the district of South Wales. Mr. Clark spoke strongly in favour of Cardiff, and the attractions in its neighbourhood. A discussion took place, during which the claims of Glasgow and Leeds were canvassed. On the motion of Fairless Barber, Esq., seconded by the Rev. E. Hill, the decision as to the place of meeting for 1871 was referred to the Council in London. Thanks having been voted to the Chairman, the meeting broke up.

At 10 A.M. the Historical Section met in the lecture room of the Town Museum, Lord Talbot de Malahide in the chair. Professor LEWIS read "Remarks on coins recently found at Sutton, near Woodbridge, Suffolk."

In submitting a vote of thanks to the writer for his contribution, the Chairman suggested that all ancient coins should be deposited as soon as possible in the nearest local museum, with an account of their discovery.

The Rev. Dr. MARGOLIOUTH read "Gleanings of Historic Anglo-Hebrews from the Annals of Ancient Mercia." Adverting to the lecture he had delivered upon a similar subject at Bury St. Edmunds last year, the writer spoke of the remarkable vessel which had been found in Suffolk about two centuries ago, and since lost. It had, however, been discovered in the Bodleian Library since the reading of his memoir last year. Tracing the history of the Jews in Mercia, their various trials and persecutions were treated of as the author had done in regard to East Anglia. In Leicester the Jews had not been confined to that part near the Jewry Wall, but had lived all over the town. After some comments by various members, a vote of thanks was passed to the writer.

Mr. H. F. HOLZ read a memoir "On the Parliament of Henry V. at Leicester in 1414." During that Parliament of thirty days many important Acts were passed which conferred a great benefit on the country. The question arose why was Leicester selected as the place for holding that Parliament ; and it was thought that some incidents in the domestic life of the king explained this circumstance. The Countess of Derby was not buried in Trinity Hospital as was supposed, but in the "King's College," an establishment which had entirely disappeared. The Lords,

who only numbered eighty-four persons, met in the Castle, while the Lower House met in the Grey Friars. Mr. Holt having referred to the changes made from time to time in the Parliamentary constitution, concluded by discussing shortly the statutes passed in the Leicester Parliament. Some remarks in commendation having been made by the Chairman, Mr. Bloxam, and others, the writer was cordially thanked for his memoir.

The Rev. J. LEE-WARNER followed with a Paper on "John Wycliff." With some prefatory remarks upon the times in which Wycliff was born, the writer reviewed the condition of affairs which seemed to furnish a key to the religious tenor of his life, especially in reference to his long cherished idea of giving his countrymen a complete vernacular Bible. Upon this work the writer made a somewhat elaborate dissertation, concluding by referring to Wycliff's general work as a Reformer and to his ministration at Lutterworth and the relics which had been brought from that place. Mr. Bloxam remarked that none of the three portraits of Wycliff exhibited in the temporary museum were of any authority. There was no genuine portrait of him. And the relic from Lutterworth church, which was said to be the garment in which he preached, could never have been seen by him, as it was of the fifteenth century. With what had been said of the noble character of Wycliff's version of the Bible he heartily concurred, and moved a vote of thanks to Mr. Lee-Warner, which was cordially voted.

At 2.30 P.M., a large company left the Bell Hotel in carriages to visit the Castle of Kirby Muxloe, about four miles west of Leicester. Among them were Lord Talbot, Sir Thomas E. Winnington, T. Tertius Paget, Esq., Major Jones, Charles Brook, Esq., Rev. R. Harley, and a large party of ladies.

Here Mr. CLARK discoursed in front of the entrance-gateway, upon the history and architectural features of the structure. KIRBY MUXLOE was an old seat of the family of Herle, whose heiress married Sir Ralph Hastings, great grandfather of William, first Lord Hastings, the Chamberlain, who built the present house. It stands in a bottom upon one of the heads of the Rothley Brook, and with a rectangular and apparently square moat, of no great breadth or depth, but full of water. This moat is probably older than the time of the Chamberlain, and the defence of the house of the Herles. The buildings, however, are all of one late date, and built of brick. They form parts of the northern site of a quadrangle, in the centre of which is rather a grand gatehouse, with octagonal flanking towers of brick with stone dressings. In the basement are circular oiellets, as for musketry, and just above them a short loop, as though to sight the gun. The portal has a single portecullis, and outside a square-headed recess, as though to contain and cover the drawbridge when up, and above this is a deep square panel, an iron hook in which evidently held up a large stone shield of the arms of the founder. In the rear this gatehouse is much injured. At the north-west angle is an excellent square tower, lofty and large, and in excellent condition, rising out of the moat, and though gutted, tolerably perfect within. This also is of brick. The toothing on the walls of this tower seem to show that the curtain between it and the gatehouse was never finished; and, indeed, the entire absence of ruins make it probable that no part of the Chamberlain's mansion was ever completed save this tower and the gatehouse. The scarp of the moat is revetted, but by a wall of moderate thickness, and which probably was but breast high, and unprovided with towers.

If the building had been completed after the design and upon the scale of what remains, it would have been a strong and very important residence. It is said that Hastings built it for Jane Shore, but it is more probable that he began it as a re-construction of his family mansion, and left it incomplete when his improved fortunes gave him possession of the far more important estate of Ashby. The church has been almost wholly rebuilt, and contains nothing worthy of notice.

Several of the features of the building and of its singular history were subjects of discussion during the course of the perambulation under Mr. Clark's guidance. The company were afterwards most hospitably entertained by John Bennett, Esq., who had erected a marquee on his grounds which are close to the castle. In the evening a *Conversazione* was held in the spacious room appropriated to the temporary Museum.

Saturday, July 30.

This was the day appointed for the Beaumanor and Grace Dieu excursion, in which other objects of great interest were also brought into the programme. A drive through about thirty miles of the most picturesque portions of the county, and the promise of being handsomely entertained at the noble mansion of Mr. Perry Herrick, added to the attractions of the day, and the party was of considerable extent. Leaving the Bell Hotel at 9 A.M., the first point reached was Groby Castle, of which the mound is almost the only remaining portion. It is said to have been destroyed in the reign of Henry II. Mr. Bloxam (in the absence of Mr. Clark), pointed out the principal points of interest. From Groby, Bradgate Park, the favourite holiday resort of the good folk of Leicester, was next reached. It contains a noble-looking ruin of a Tudor mansion, situated in the midst of lovely scenery, and it is chiefly venerated on account of its connection with the Lady Jane Grey, who was born there, and passed her youth within its precincts. Mr. Bloxam again acted as spokesman, upon the history of the house and the monument in the ruined chapel.

The chapel is the only part of this once extensive mansion which is now covered in. It joined on to other buildings on the east and north sides, and was formerly lighted by a large square-headed window on the south, divided into twelve compartments by mullions and transoms, the six lowest of which are now bricked up; and on the west by two square-headed windows of smaller dimensions, both of which are also bricked up, and the mullions of them destroyed. Above the large window on the south side is a smaller one, which, like the rest, is now blocked up. All these windows have stone dressings, and a horizontal moulding of stone runs along the west and south sides of the building. On entering the chapel we find the interior to be quite plain; the length from north to south 35 ft., the breadth 21 ft. It was repaired some years ago by order of the Earl of Stamford, and in a vault beneath the pavement the remains of several of his ancestors are deposited; but, with the exception of a monument on the east side, which we shall shortly notice, the chapel contains nothing worthy of observation.

On a high tomb on the east side of the chapel, beneath an enriched pediment, supported by two Ionic pillars richly carved, and under a coved arch, the soffit of which is pannelled and carved, repose the recumbent

effigies of Henry Grey, created Baron of Grooby by King James I., and of Anne his wife, daughter of the celebrated Lord Burleigh. He is represented as equipped in a complete suit of plate armour, over which is a rich mantle, with a furred cape fastened by a morse or clasp in front over the breast, below which it falls open to expose the armour. He is bareheaded, with moustachios and a long beard, and his head reclines upon a helmet surmounted by a crest. His armour consists of a gorget and breast-plate, with taces and tassets attached, cuisses or thigh-pieces, *genouillères* or knee-caps, and jambs. The lower parts of the legs are destroyed; at the bottom, where the feet rested, are his gauntlets, composed of overlapping plates; his arms and shoulders are likewise cased in plate down to the wrist, but the greater part of the right arm is destroyed. The whole of the suit is richly ornamented. His lady is represented as habited in a long bodiced gown, closely fitting to the waist, and from thence falling in ample folds to the bottom of the feet; over this is a large mantle, with a furred cape, open in front; her head is covered with an ornamental cap, and rests on a double cushion, and a long veil falls behind; her neck is encircled by a ruff, and from it are suspended ornaments reaching nearly to her feet; her sleeves are loose, with close cuffs at the wrist. The hands of this effigy are destroyed, but they seem to have been held up in a praying posture. The west side of the tomb is divided into three compartments, within which, surrounded by scroll-work, are the following armorial bearings:—

1. Arms of Grey. Barry of six, argent and azure in chief, three torteauxes, and label of five points.

2. Grey impaling a saltire . . . between twelve cross crosslets.

3. The same arms as impaled with Grey.

The pediment of this monument is surrounded by an escutcheon or shield, surrounded by scroll-work containing the following quarterings surmounted by a crest:—

1. Grey (before described).

2. Hastings. Argent, a manuch sable.

3. Valence. Barry of eight, argent and azure.

4. Ferrars. Gules, seven mascles conjoined, or, three, three, and one.

5. Astley. Azure, a cinquefoil ermine.

6. Woodville. Argent, a fess and canton gules.

7. Bonville.

8. Harrington. a fret.

Supporters, two unicorns, ermine, armed, crested and hooped or, motto, “à ma puissance.”

There is a tradition extant that the body of Lady Jane Grey was brought down from London in the family waggon and privately buried in the vault beneath this chapel.

Uverscroft Priory was the next object *en route*. Tanner says it was the union of two priories which were in two solitary places in the forest of Charnwood. The ruins are considerable—consisting of a great portion of the west end and south side of the church, part of the refectory and other buildings. Some of these belonged to the original structure founded by Robert le Bossu in the twelfth century, but much was of a later period. These points were carefully commented upon by Mr. Bloxam.

The route towards Woodhouse Chapel and Beaumanor was then taken across the fields, whereby many good points of view were obtained. Crossing some high land, Beacon Hill was passed on the left, and the little village of Woodhouse was soon reached. Here is a chapel, in which are the excellent windows of stained glass well known to archaeologists by Mr. J. Gough Nichols' work. Mr. Nichols was ready with his little book, and read from it the story of Mr. Herrick's careful restorations, which were warmly commended. At about 2 p.m. the party arrived at Beaumanor Park, a handsome modern residence upon an old site, and with many historical associations. Here they were most courteously received by Mr. and Mrs. Herrick, and the mansion thrown open to them. Among the many remarkable things in this mansion is the bedstead known as "King Richard's Bedstead," on which that king is said to have slept the night before the battle of Bosworth. Mr. Herrick told all that was popularly known about the object and the circumstances of his purchase of it. The greater part of the bedstead is much later than the period of Richard III., but Mr. Thompson maintained that the "bed-stock" or well was very probably of the fifteenth century. Many of the family portraits had been kindly sent to the Museum of the Institute, but there were many paintings of great interest and value to be seen. One of the most attractive objects was the coach made for the wedding of Mr. Herrick's grandfather in 1740. It was amply provided with tools and other appliances for repair in case of a break-down.

In a large marquee in the grounds a most tasteful *déjeuner* was spread, to which ample justice was done. At the conclusion of the repast, Mr. Herrick, after a genial welcome to his guests, spoke of the value of such archaeological rambles, and gave some interesting particulars relating to the mansion. He concluded by proposing the toast "The President of the Royal Archaeological Institute and success to the Society." Lord Talbot de Malahide acknowledged the toast, and expressed the gratitude of the Institute towards such patrons and supporters as Mr. Herrick. He proposed the health of their host, and prosperity to him and his. Mr. Herrick responded, cordially repeating his welcome to Beaumanor. The Mayor of Leicester, on behalf of his fellow-townsmen, tendered his best thanks to Mr. Herrick for his hospitality. The Ven. Archdeacon Fearon, in proposing the health of Mrs. Herrick, spoke in high terms of Mr. Herrick's help in matters of church building. Mr. Herrick having acknowledged the toast, he requested Mr. Nichols to read his notes on the history of Beaumanor. Mr. Nichols gave an epitome of the history of Beaumanor from his grandfather's history of Leicestershire, prefacing it with some particulars about the forest of Charnwood in which it was situated, and the descent of the Manor from the De Spensers and Beaumonts. The Rev. E. Hill moved a vote of thanks to Mr. Nichols, and Mr. Herrick in seconding it, said there was no family that the county of Leicester was so much indebted to as the Nichols family.

Shortly after, the numerous party, highly delighted with their reception and their parting compliments to Mr. and Mrs. Herrick, and drove round by Loughborough to Grace Dieu. This was a priory founded by Rodin de Verdon about 24 Henry III. for nuns of the order of St. Austin. It was beautifully situated near the centre of Charnwood Forest, but the ruins have diminished since they were engraved by Buck in 1730. They were at a little distance from the road, and necessitated a

walk over rough ground among very pleasant scenery. Thence continuing the route to Coalville, a special train was found in readiness, and the party returned to Leicester.

Monday, August 1.

A meeting of the Historical Section took place in the Lecture Room of the Town Museum, at 10 a.m., G. Cartlew, Esq., in the chair. The Rev. J. Spittal read a memoir by the Rev. Assheton Pownall, on a recent find of Roman coins in Leicestershire. The discovery was made at Lutterworth in 1869, and consisted of 262 copper coins of the Emperors from Vibius Volusianus to Quintillus, extending over eighteen years. The writer expatiated upon the value of numismatics, and their application to historical studies. Mr. Weatherhead remarked on the clearness of the impress of the coins, some of which seemed as fresh as if just minted. He moved a vote of thanks to both the author and reader of the memoir. In the absence of the authors of the other memoirs which had been announced, Mr. Weatherhead, the Curator of the Town Museum, conducted the party over that excellent collection of local antiquities and natural history. At 1 p.m. a small party of excursionists left the Railway Station for Melton Mowbray and Oakham. At Melton Mr. Vincent Wing met the visitors at the church, and accompanied them on their inspection of this fine fabric. At Melton carriages were ready to convey the party to Oakham. Proceeding to the church, Mr. Fairless Barber pointed out some of the more remarkable points in this very interesting structure. At the Hall, Mr. Burt read some notes upon its history and the successive owners of this building, the only complete existing specimen of a Norman Hall. In the evening a *Conversazione* was held in the temporary Museum.

Tuesday, August 2.

The concluding meeting was held in the Guildhall, the Mayor occupying the chair. The Chairman expressed the regret with which he felt that the pleasant meeting of the Institute had been brought to an end, and that the only duty now remaining was the gratifying one of recording their acknowledgments to those who had so much contributed to the success of the meeting. A series of resolutions of thanks were then proposed to the Corporation of Leicester and the local Societies for their reception of the Institute, to Mr. Herriek, to the Mayor of Leicester, and others for their generous hospitalities, to the writers of memoirs, the contributors to the Museum, and to Mr. Clark, Mr. Parker, and others who had favoured the meeting with addresses and explanations at the various points of interest which had been visited. These votes having been suitably acknowledged, the Leicester Meeting ended amidst expressions of great satisfaction and goodwill.

The Museum.

The temporary Museum of the Institute was formed in a spacious room at the corner of Wellington Street, in the centre of the town. It had been lately acquired by the Corporation for a Free Library, and was kindly placed at the disposal of the Institute before it was so occupied. It was in every way well adapted for the purposes of the Museum. Round

the walls were hung pictures, drawings, and other objects. Among these must be specially noticed the cartoons of the painted glass in Fairford church. They had been executed in pursuance of directions from the Science and Art Department of the Committee of Privy Council, and are to be deposited in the Museum at South Kensington for the use of students. One side of the room was taken up by a long case covered with glass in the manner usually adopted under Mr. Tucker's directions, while stands and tables of various sizes were placed about the room on which were displayed armour, rare books, and MSS., specimens of embroidery, metal work, wood carvings, &c. Of this excellent collection our space will not permit a complete list to be given.

Portraits of local worthies may be first mentioned. Of Wycliffe three portraits were sent—by the Earl of Denbigh, Mr. H. Hippisley, of Lamborne, and the rector of Lutterworth. Mr. Hippisley's had appearances of the greatest antiquity, is well painted, and is not without expression and character, but is probably not earlier than the reign of Henry VIII. Wycliffe died in 1384. Lord Berners sent a fine portrait of the first Lord Berners, by Holbein. The Corporation of Leicester sent a portrait of Robert Herrick, Mayor of Leicester in 1581, 1593, and 1605, and M.P. for Leicester in 1588. In a corner is the verse—

“ His picture whom you see
When he is dead and rotten
By this shall remembered be
When he shall be forgotten.”

Also portraits of Sir William Herrick, M.P. for Leicester in 1600, 1605, and 1620, and other members of a family in every way endeared to the county; portraits of Henry, Earl of Huntingdon, &c., in the time of James I.; of Sir Thomas White, founder of the great Loan Charity to Leicester and sixty-three other corporate towns; of Wm. Darker, three times M.P. for Leicester; and of the Rev. Thomas Hayne, who died in 1645. He was the principal donor of the books in the Town Library. Mr. Perry Herrick sent portraits of Sir William Heyrike, who represented Leicester in the Parliaments of 1600, 1605, and 1629; also of Mary, the wife of John Eyriek, Esq., twice Mayor of Leicester, deceased in 1611. She “lived with her husband in one house fifty-two years, and in all that time buried neither man, woman, nor child, though they were sometimes twenty in household.” The Rev. W. Sawyer, of Old Dalby Hall, sent a portrait of Admiral Sawyer, by Sir Joshua Reynolds; Mrs. Farmer Cooke, a portrait of Henry, ninth Earl of Westmoreland, and of Dr. Farmer, Master of Emmanuel College, in the reign of Charles I.; Mrs. Egan, fine portraits of Margaret Beaufort and Prince Arthur, and one of Prince Rupert. Nearly akin to the portraits, as decorations of the Museum, were the cartoons of the Fairford glass before mentioned. These are the work of the Rev. J. G. Joyce, and are of the full size of the originals, from which they have been traced, and afterwards coloured with great care and artistic skill.

But few remains of the so called prehistoric period were exhibited. These were chiefly furnished by the Town Museum and Mr. Goddard. The evidences previous to the time of the Romans were not of any great importance.

Leicester is very rich in remains of the Roman and post-Roman

periods. Tessellated pavements abound, and some fine specimens have been carefully deposited in the Town Museum. They were too large and heavy to be transferred to the temporary Museum. The chief exhibitors under this head were—the Town Museum, which contributed a good collection of objects of Samian and other ware, among which was a vase of peculiarly fine fabric and ornamentation; the ware is extremely thin and delicate, and shining black; it is supposed to have been made at Castor, Northamptonshire, the site of the Roman *Durobrivæ*; also Roman lamps, ampullæ, bricks and mortaria. The Rev. E. Elmhirst sent a number of Roman hand-bricks found on the Lincolnshire coast when the action of the tide had laid bare the site of a Roman pottery; two Roman horseshoes found on the Watling Street, near Lutterworth. They indicate having been fastened to the foot with the concave side next the sole, and the convex outwards. Mr. J. Goddard sent numerous examples of Roman vessels of great variety. The exhibitor's father had been a collector of good knowledge and taste, and the Institute was greatly indebted for the contributions obligingly furnished from his stores.

From various parts of the county came Anglo-Saxon remains. Mr. James Thompson contributed sword-blades, spear-heads, &c. Mr. Fetch, of Melton Mowbray, sent a variety of weapons, instruments, and utensils, including five earthenware bowls in graduated sizes, brown in colour and very heavy; Major Knight, of Glen Parva, sent a small collection, the results of diggings on his estate, and some fibulæ were sent from the Melton Mowbray Museum.

Of arms and armour there were but few examples; the chief contributors were Mr. G. Ashby Ashby, who showed objects found on the field of Naseby; Mr. Harrold, Mr. Sarson, Mr. Kelly, and Mr. Waddington. In porcelain and pottery the museum was very rich, the chief contributor being Mr. Goddard. This gentleman exhibited a very varied collection, comprising fine specimens of Plymouth, Leeds, Worcester, and Chelsea wares, some good objects of Delph and Majolica, Battersea enamel portraits, and Oriental porcelain, besides several pieces whose origin could not easily be determined. The contributions from the Town Museum, Mr. Fowkes, Mr. North, Mr. Clarke, the Rev. Assheton Pownall, Mr. Fozzard, and Mr. Edward Marshall, added greatly to the attractions of what was one of the most satisfactory displays. A very choice collection of Venetian glass was shown by the Rev. Nigel Madan, Rector of Polesworth, exhibiting some very remarkable forms, and delicate texture and tint of material. Two very curious glass bottles found in the foundations of churches in the county were sent by the Rev. Assheton Pownall. Relics of royalty were exhibited by the Earl of Denbigh, who sent black silk breeches of Edward VI., and gauntlets and other portions of the dress of Queen Elizabeth; Mr. Neale sent a silver-mounted posset cup and cover that belonged to James II.; and Mr. Goddard contributed a stomacher, glove, and sash worn by Queen Anne. Of embroidered objects the Dominican Fathers of Leicester sent some excellent specimens. One of these was about A.D. 1300. It represents our Lord seated on a throne, holding the orb and cross in the left hand and giving benediction with the right. Above the canopy which covers him are the words "*Johannis de Thaneto*" in Lombardic characters; with blue lions on the orfrevs. There were also two other pieces of fine early embroidery

taken from old copes or chasubles; a crimson and gold chasuble of the time of Henry VII.; a white, richly embroidered chasuble of the 16th century.

The MSS. sent by the Corporation were but a sample of the rich stores it possesses—as rich, perhaps, as any town in the kingdom. Some very interesting early charters were shown, which were also good specimens of handwriting and condition; charters of King John, of some of the Norman Earls of Leicester, of William Marshall, Earl of Pembroke, and others; also one of the Merchant Guild rolls of the 12th century, and the “Codex Leicestrensis,” a 14th century copy of the Gospels in Greek. Dr. O’Callaghan, of Leamington, contributed autograph letters of English and foreign royal and noble personages of the 15th and 16th centuries. Mr. Kelly exhibited churchwardens’ accounts for the church of St. Mary “de castro,” Leicester, 1490—1; Mrs. Collis sent some 16th century pamphlets and MSS., among which is an “Order of Comon Praier,” that seems to deserve examination; and the Town Museum some original letters of General Washington. Ivory sculpture was represented by very few examples. Mr. Neale sent small medallions of the twelve Cæsars, which were of great beauty; the leaf of a triptych with four subjects; and four other carvings. Mr. Holt sent a horn representing hunting subjects, with medallion of Augustus the Strong, of Saxony, and his armorial bearings; also several plaques, a triptych, and a leaf of a diptych.

Early books, views, &c., chiefly relating to the county were in considerable number. They were contributed by Mr. Sarson, the Town Museum, Mr. Thompson, Mr. Goddard, Mr. Godding, and Mr. Bracebridge; while many sketches and engravings, showing the changes that have been made in the town during the last century, were contributed. Jewels, plate, and personal ornaments were exhibited by Lord Berners, Mr. Ashby, Mr. G. H. Nevinson, Mr. and Mrs. C. Tucker, and Mr. Holt. Among miscellaneous objects may be specified the draughtsmen, dice, and chessmen of Lord Berners; the eastern standards of Mr. Holte Bracebridge; the portrait of Charles II., and plaques of enamel of Mr. Goddard; the patchwork of 1635, bound in needlework, of Mr. North; the key of the prison of Newgate, London, the Algerine mace and other things shown by Mrs. Farmer Cooke; the Corporation mace and town seals, of the Corporation of Leicester; the lesser silver mace of the Corporation, belonging to Mr. G. H. Nevinson; the head of an armed warrior formerly at Alton Towers (which has been used as a reliquary), belonging to Mr. Fim; and a remarkable reliquary in the form of a book in ivory, belonging to Mr. Holt. This interesting object was presented by the widowed Duchess of Guise to Catherine de Medici shortly after the murder of the Duke by Poltrot at the siege of Orleans. It contains four great and eight lesser relics; it has medallions painted on rock crystal, and is otherwise richly ornamented.

The Central Committee desire to acknowledge the following donations in aid of the expenses of the Leicester meeting, and of the general purposes of the Institute:—The Hon. Lord Neave, 2*l.* 2*s.*; Octavius Morgan, Esq., M.P., V.P., 3*l.*; J. Dunn Gardner, Esq., 2*l.*; C. S. Greaves, Esq., 2*l.*; J. Henderson, Esq., 2*l.*; A. W. Franks, Esq., 2*l.*; G. T. Clark, Esq., 2*l.*; H. Hoggisley, Esq., 2*l.* 2*s.*; Col. Brooke, 1*l.* 1*s.*



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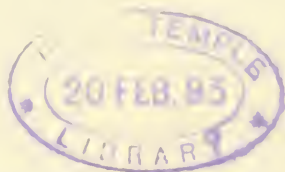
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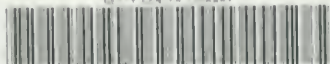
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